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CONTENTS.

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A LECTURE (Abstract of) on Some Common Errors in the Diagnosis of Nervous Disease. Delivered at the Medical Graduates' College and Polyclinic on Nov. 3rd, 1913, by S. A. KINNIER WILSON, M.D. Edin., M.R.C.P. Lond., B.Sc., Assistant Physician to the Westminster Hospital and to the National Hospital for the Paralysed and Epileptic, Queen-square, London 1677

AN ADDRESS on Cancer of the Prostate. Delivered before the Nottingham Medico-Chirurgical Society on Dec. 4th, 1913, by P. J. FREYER, M.A., M.D., M.Ch., Lieutenant-Colonel, I.M.S. (R.); Consulting Surgeon, Queen Alexandra's Military Hospital; Surgeon, St. Peter's Hospital. — *(Illustrated)*..... 1680

ORIGINAL ARTICLES.

Jackson's Pericolic Membrane: Its Nature, Clinical Significance, and Relation to Abnormal Mobility of the Proximal Colon. By JOHN MORLEY, Ch.M. Vict., F.R.C.S. Eng., Honorary Surgeon, Ancoats Hospital, Manchester; Lecturer in Clinical Anatomy, Manchester University; Ashby Research Scholar. — *(Illustrated)*..... 1685

A Method of Removal of Carcinoma of the Prostate (Abdomino-Perineal Complete Prostatectomy). By RUSSELL HOWARD, M.S. Lond., F.R.C.S. Eng., Assistant Surgeon, London Hospital; Surgeon, Poplar Hospital.—*(Illustrated)*..... 1690

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MEDICAL SOCIETIES.

ROYAL SOCIETY OF MEDICINE: SECTION OF THE HISTORY OF MEDICINE:—Martial and Medicine. — Medical Aspects of the Greek Anthology.—Exhibition of Specimens..... 1697

SECTION FOR THE STUDY OF DISEASE IN CHILDREN:—Exhibition of Cases and Specimens..... 1697

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EDINBURGH MEDICO-CHIRURGICAL SOCIETY: Isolation and Quarantine Periods 1699

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY: Œdema Vulvi..... 1700

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Miscellaneous Volumes..... 1704

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LEADING ARTICLES.

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THE MENTAL DEFICIENCY ACT 1707

CONSTITUTIONAL CHANGES IN THE BRITISH MEDICAL ASSOCIATION..... 1708

ANNOTATIONS.

The Prevention of Human Trypanosomiasis in Africa... 1709

Intermenstrual Pain..... 1709

The Use of the Cane..... 1710

Fatal Meningitis Fifteen Years after a Bullet Wound of the Brain 1710

Glanders in Human Subjects.. 1711

Johannes Evangelista Purkinje 1711

Erythema Nodosum and Tuberculosis..... 1712

The Dependence of Leprosy on Fish Eating 1712

Epsom College..... 1713

VITAL STATISTICS:
Health of English Towns ... 1715
Health of Scotch Towns..... 1716
Health of Irish Towns..... 1716

SPECIAL ARTICLES.

Medicine and the Law..... 1714

November at Home and Abroad 1714

Royal Commission on Venereal Diseases..... 1715

The Services..... 1716

Medical Practice under the Insurance Act. XXX.—South Wales and Monmouthshire.—*(To be continued)*..... 1719

OBITUARY.

Percy Kingsley Steele, M.B., B.Ch. Vict., F.R.C.S. Eng., Honorary Surgeon to the Royal Halifax Infirmary, &c. 1718

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Hubert Liston Willcox, L.R.C.P. Lond., M.R.C.S. Eng., Honorary Surgeon to the Warminster Hospital.... 1718

HOME AND FOREIGN NOTES.

(FROM OUR OWN CORRESPONDENTS.)

Manchester 1721
Wales and Western Counties.. 1722
Scotland 1722
Ireland 1723
Paris 1724
Berlin 1725
Italy..... 1725
Budapest 1726
India 1726
Australia..... 1727

THE NATIONAL INSURANCE ACT.

The Representative Body of the British Medical Association and the Insurance Act 1733

The Treatment of Tuberculosis 1733

Clause 2 (ii.) of the New Draft Agreement..... 1734

The Allocation of Surplus Funds in London 1734

Form Med. 16 (Revised) and Form Med. 17 (Revised)..... 1734

Birkenhead Insurance Committee: An Important Question 1734

Swansea Hospital and Insured Patients..... 1735

Brighton Insurance Committee..... 1735

Bristol Insurance Committee... 1735

The late Dr. Horace Dimock... 1735

CORRESPONDENCE.

Epsom College (Sir Henry Morris, Bart.) 1723

Advertising and Canvassing under the National Insurance Act (Prof. Robert Saundby) 1723

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The Apothecaries' Hall of Ireland and the General Medical Council (Dr. J. C. McWalter)..... 1723

The Faculty of Medicine of the University of London (Dr. E. Graham Little).... 1729

Sewage Disposal in the South of England (Dr. Andrew Balfour)..... 1730

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The Government of the Royal College of Surgeons (Mr. R. Brudenell Carter)..... 1732

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The Relation Between Herpes Zoster and Chicken-pox (Dr. G. Richardson)..... 1732

The Anatomy of the Pelvis (Dr. Douglas E. Derry)..... 1733

Astrology in Medicine (Mr. Alfred J. Pearce)..... 1738

The Psychology of "Damn" (Dr. F. Lucas Benham)..... 1739

Housing and Town Planning Act: A Little Economy..... 1739

The Case of Mr. H. T. Hamilton (Dr. W. H. Gimblett)..... 1739

MEDICAL NEWS.

Medical Sickness and Accident Society 1691

London Hospital Medical College (University of London) 1713

Foreign University Intelligence 1713

Association of Registered Medical Women..... 1732

University of Cambridge..... 1735

Donations and Bequests 1735

Metropolitan Asylums Board: Instruction in Hospital Administration 1735

Literary Intelligence..... 1736

West-End Hospital for Diseases of the Nervous System 1736

The Worshipful Company of Plumbers: Dinner to the Lord Mayor of London..... 1736

Society of Medical Officers of Health: The School Medical Service Group..... 1736

Books, &c., received 1736

Appointments..... 1737

Vacancies..... 1737

Births, Marriages, and Deaths 1738

Notes, Short Comments, and Answers to Correspondents 1738

Medical Diary..... 1740

Meteorological Readings..... 1741

Acknowledgment of Communications received 1742

FOR INDEX TO ADVERTISEMENTS SEE PAGES 2 & 4.

INDEX

MEDICAL AND OTHER BOOKS AND PUBLICATIONS

PAGE

BAILLIERE, TINDALL & COX:—
Adams & Cassidy .. Abdominal Diseases.. 3
Fisk ..... Indigestion 6
Bruce ..... Sciatica ..... Cover 1
Castellani & Chalmers. Tropical Medicine .. 3
Clarke, R. .. Errors of Accommodation, &c. .. Cover 1
Diculafoy .. Medicine..... 3
Fitzwilliams Operative Surgery .. 3
Gray ..... Diseases of the Ear .. 3
Luys..... Gonorrhœa 3
McCaw .... Diseases of Children. 3
Sommerville Public Health Cover 1
The Pocket Anatomy ..... Cover 1
Torok & Grout .... Surgery of the Eye .. 3
Williams .. Minor Maladies..... 3
Walsh ..... Diseases of the Skin. 5

CAMBRIDGE UNIVERSITY PRESS:
Duckworth. Morphology, &c..... 5
Graham-Smith .... Flies in Relation to Disease 5
MacCallan.. Trachoma .... Cover 1
Metchnikoff Immunity in Infective Diseases 6
Peters..... Epidemic Diarrhœa .. 6
Reynolds .. Vertebrate Skeleton.. 5
The Bacteriology of Diphtheria .. 5
Trotter .... Embolism and Thrombosis 5

PAGE

CASSELL & CO:—
Morris, Sir M..... Diseases of the Skin.. 6

CHURCHILL, J. & A.:—
Books for Christmas Presents Cover 1
Edwards .. Diseases of Rectum, &c. ..... Cover 1
Fenwick .. The Value of Radiography ..... Cover 1
Thorne, Bezly .... Schott Nauheim Treatment of Heart 6

FROWDE AND HODDER & STOUGHTON:—
Lockwood.. Aseptic Surgery..... 6
" .. Clinical Surgery..... 6

GLAISHER:—
Herschell .. Indigestion .. Cover 1

LEWIS:—
Martindale & Westcott . Extra Pharmacopœia 6
Powell, Sir R. D., & Hartley Diseases of the Lungs and Pleuræ.. Cover 1

PAGE

LONGMANS, GREEN & CO.:—
Herschell & Abrahams Chronic Colitis Cover 1
Watson-Williams. Rhinology 6
White, &c.. Alimentary Toxæmia 9

MACMILLAN & CO.:—
Ballance .. Cerebral Decompression in Ordinary Practice 6
Lockwood.. Appendicitis 6
Tubby ..... Deformities .. Cover 1

MEDICAL PUBLISHING CO.:—
Lane, Sir W. A.. Operative Treatment of Fractures. Cover 1
" Cleft Palate and Hare Lip ..... Cover 1

MILLS & BOON:—
Ash ..... Nerves and the Nervous .... Cover 1

NISBET & CO.:—
Lane, Sir W. A.. Treatment of Chronic Constipation. Cover 1

PULMAN & SONS:—
Greeff ..... Microscopic Examination of the Eye .. 6

PAGE

SAUNDERS COMPANY:—
Anders .... Practice of Medicine. 7
Bastedo .... Materia Medica..... 7
Books on Materia Medica and the Practice of Medicine .... Cover 1
Butler..... Materia Medica 7
Carter..... Diet Lists 7
Kemp ..... Stomach, Intestines, and Pancreas 7
Stevens .... Practice of Medicine. 7

WRIGHT & SONS (Bristol):—
Bourne .... Synopsis of Midwifery Cover 1

OFFICIAL AND GENERAL ANNOUNCEMENTS

APPOINTMENTS VACANT:—
Alnwick Infirmary 78
Argyle and Bute Asylum, Lochgilphead 75
Belgrave Hospital for Children .. 74
Blackburn and East Lancashire Infirmary 75
Bradford Poor-law Union Hospital, &c. 73
Cancer Hosp. (Free), Fulham-road 72
Charing Cross Hospital 72
Cheshire Education Committee .. 73
City Fever Hospital, Birmingham 73
City of Nottingham Education Committee 73
Corporation of Birmingham City Hospital 72
Corporation of Manchester..... 73
Corporation of Manchester—Monsall Fever Hospital 73
County of Dunbarton 76
County Asylum, Chester 72
County Asylum, Lancaster 75
County Asylum, Whittingham 72
County Borough of Preston..... 75
Coventry and Warwickshire Hosp. 72
Croydon General Hospital 72
Derbyshire Royal Infirmary 74
East Sussex Hospital, Hastings .. 72
Essex County Hosp., Colchester .. 74
Govan District Asylum, Crookston 75
Great Northern Central Hospital.. 75
Great Yarmouth Hospital 74
Hamlet of Mile End Old Town 75
Hampshire County Council 74
Hospital for Women, Soho-square. 74
India Office 73
Joint Counties Asylum, Carmarthen 72
Jones, Diaas Mawddwy..... 72
Kensington and Fulham General Hospital 76
Kent County Asylum, Maidstone.. 72
Kent and Canterbury Hospital, Canterbury 74
Kettering & District General Hos. 74
King Edward VII. Hospital for Windsor, Eton, and District 72
King Edward VII.'s Hos., Cardiff 72
Laboratories of Pathology and Public Health 74
Leeds General Infirmary 71
Lowestoft Hospital 71
Macclesfield General Infirmary .. 76
National Hosp. for the Paralysed and Epileptic 74
New Hospital for Women..... 76
Noble's Hospital, Douglas 75
Norfolk and Norwich Hospital.... 74
Nottingham General Dispensary... 72
Oxford County Asylum, Littlemore 72
Prince of Wales's General Hosp., Tottenham 74
Queen Mary's Hosp. for Children, Carshalton 75
Queen's Hospital, Birmingham .. 74
Royal Albert Edward Infirmary and Dispensary, Wigan 71
Royal Devon and Exeter Hospital 71
Royal Eye Hospital, Southwark .. 76
Royal Halifax Infirmary 71
Royal Hampshire County Hosp. 74
Royal Infirmary, Hull..... 71
Royal London Ophthalmic Hosp.. 75
Royal Mineral Water Hos., Bath.. 72
Royal Naval Medical Service..... 73
Royal Surrey County Hospital .. 74
Royal Sussex County Hospital .. 72
Royal Victoria and West Hants Hospital, Bournemouth 75
St. Mary's Hospital, Paddington.. 73

APPOINTMENTS—(Continued).
St. Mary's Hospital for Women and Children, Plaistow..... 72
Salford Union Infirmary 74
Sheffield Children's Hospital..... 74
Shoreditch Infirmary 73
Shropshire Education Committee. 73
Somerset & Bath Asylum, Cotford. 71
South Devon and East Cornwall Hospital, Plymouth..... 71
Sunderland Union 73
Swansea General and Eye Hospital 74
University of Liverpool..... 73
Walthamstow Urban District Council 75
West Kent General Hospital..... 74
West Riding Asylum, Wakefield .. 74
Westmorland Consumption Sanatorium and Home..... 75
Worcester General Infirmary..... 71

ASSISTANCIES, MEDICAL..... 76

ASYLUMS, HOMES, &c.:—
Ashwood House, Kingswinford .. 63
Association of Medical Men Receiving Resident Patients 70
Barnsley Hall, Bromsgrove 63
Barnwood House Hospital 64
Bishopstone House, Bedford..... 63
Bootham Park, York 63
Broadlands, Maidstead..... 70
Brunton House, Lancaster 70
Buntingford House Retreat, Buntingford 67
Camberwell House, Peckham-road 66
Cheadle Royal..... 64
City of London Mental Hospital, Stone..... 71
Clarence Lodge, Clapham-park .. 63
Colthurst House, Alderley Edge .. 62
Coppice, The, Nottingham 64
Dalrymple House, Rickmansworth 67
David Lewis Colony, Alderley Edge 62
Duff House, Banff..... 68
Ghyllwoods 66
Grove House, Church Stretton..... 64
Grove, The, Catton, Norwich..... 64
Haslemere Nursing Home 71
Haydock Lodge, Newton-le-Willows 65
Haynes, Brentwood..... 71
Heigham Hall, Norwich 63
Holmesdale, Hastings 70
Home for Epileptics, Maghull 63
Invernith Lodge Sanatorium, Colinsburgh 66
Kingsdown House, Box..... 63
London Fever Hospital..... 64
Malling Place, Kent 64
Manna Mead, Blackheath 70
Melbourne House, Leicester 70
Mendip Hills Sanatorium 67
Meyrick, Brighton 71
Middleton Hall, Co. Durham..... 63
Moat House, Tamworth 64
Mount Pleasant, Wanstead..... 71
Mount Vernon Hospital for Consumption 67
Mundesley Sanatorium 66
Newmains Retreat, Lanarkshire.. 67
New Saughton Hall, Polton, Midlothian 65
Nordrach-on-Dee, Banchory 66
Northumberland House, Finsbury park 65
Northwoods House, Winterbourne 66
Norwood Sanatorium, Ltd..... 66
No. 592, L.O., Strand 71
Osea Island, Heybridge..... 68
Otto House, West Kensington 63
Peckham House..... 66

ASYLUMS—(Continued).
Pendyffryn Hall Sanatorium, Nordrach-in-Wales 67
Pinewood Sanatorium, Wokingham 67
Plympton House, Plympton 64
Portsmouth Corporation Mental Hospital 63
Ruebury Sanatorium, Northallerton 70
St. Andrew's Hospital, Dollis Hill 71
St. Andrew's Hosp., Northampton 64
St. George's Retreat, Burgess Hill 63
St. Luke's Hos. for Mental Diseases 63
Springfield House Private Asylum, Bedford 64
Stocker, Craven-street 71
Stretton House, Church Stretton.. 64
The Grange, Rotherham 64
Vale of Clwyd Sanatorium 68
Warneford Asylum, Oxford..... 63
Wye House, Buxton..... 64
Yarrow Convalescent Home, Broadstairs 65

COMPANIONS:—
No. 667, L.O., Strand 76

FINANCIAL, &c.:—
Equitable Reversionary Interest Society..... 60

HEALTH RESORTS, BATHS, &c.:—
Alexandra Therapeutic Institute.. 70
Klosters, Grisons 69
Smedley's, Matlock 70

HOTELS:—
Grand Hotel Guglielmina, Ospedaletti 69
Hotel Angst, Bordighera 69
Hotel Beau-Rivage 70
Hotel Bristol, Mentone..... 69
Hotel de la Reine, Ospedaletti 69
Hotel Hesperia, Bordighera 70
Hotel Imperial, Menton 69
Knowle Hotel, Sidmouth 70
Pension & Hotel Buol, Davos-Platz 69

HOUSE & ESTATE AGENTS:—
Bedford & Co., Wigmore-street.... 77
Bray & Co., Bexhill 77
Clarke & Co., Seymour-street..... 77
Clark & Son, New Cavendish-street 77
Elliott, Son & Boyton, Vere-street. 77
Goad, Camberwell-road..... 77
Ley Clark, Wimpole-street 77
Lummis, Westcliff-on-Sea 77
Noys & Howes, Sydenham Station 77
No. 695, L.O., Strand 77
548, York-road, Wandsworth 77

LIFE & FIRE ASSURANCES, &c.:—
General Life Assurance Co. 60
National Provident Institution .. 60
Prudential..... 60

MASSAGE:—
Harley Institute School of Massage 62
London School of Massage 62

MEDICAL ACCOUNTANTS &c.:—
Doctors' Accountancy Bureau, Perth 6
Turner 77

MEDICAL AGENTS:—
Fieldhall, Limited..... 79
Manchester Clerical, &c., Assoc... 78
Medical Agency 61
Needes, Herbert 61
Needes, J. C. 78

MEDICAL AGENTS—(Continued).
Peacock & Hadley..... 61
Scholastic, Clerical, &c., Assoc. .. 80
Turner 79

MEDICAL SCHOOLS:—
(LONDON.)
London School of Clinical Medicine 59
St. Mary's Hospital Medical School 59
West London Post-Graduate Coll.. 58

NURSING INSTITUTES:—
Army and Navy Male Nurses Co-operation 62
Co-operation of Temperance Male and Female Nurses 61
General Nursing Association..... 60
Hospital for Sick Children, Great Ormond-street 61
Leeds Trained Nurses' Institution 60
London Nurses' Association 62
London Temperance Male and Female Nurses Co-operation .. 61
Male Nurses Temperance Co-operation 62
Mental Nurses' Co-operation..... 61
National Hospital Male Nurses' Association 61
New Mental Nurses' Co-operation..... 60
Nurses' Co-operation, Portland-place 61
St. Bartholomew's Hosp. Trained Nurses' Institution 62
St. John's House 61
Temperance Association of Male Nurses, Ltd..... 62
Temperance Male Nurses Co-operation 61
Temperance Male and Female Nurses Co-operation 61
The Retreat, York 60

OFFICIAL NOTICES:—
City of London Lying-in Hospital.. 58
Epsom College 57
Imperial College of Science and Technology 59
London Hospital 59
London School of Tropical Medicine 59
Medical Graduates' College, &c. .. 58
Middlesex Hosp. Medical School.. 59
Queen Charlotte's Lying-in Hospital 58
Royal Coll. of Physicians of London 59
Royal (Dick) Veterinary College, Edinburgh 59
Royal London Ophthalmic Hosp... 58
Royal Society of Medicine., Cover 1
Royal Surgical Aid Society 59
The Murdoch Trust..... 59
Throat Hospital, Golden-square .. 59
University of Cambridge 59
University of London, King's Coll. 58
West End Hospital for Diseases of Nervous System..... 58

PARTNERSHIPS & PRACTICES 78

RAILWAY & STEAMSHIP CO.'S:—
New Zealand Shipping Co. 60
White Star Line—
Glorious West Indies 60

SCHOOLS, PREPARATORY, &c.:—
No. 667, L.O., Strand 59

TUTORS & LECTURERS:—
Beckton 60
Med. Corres. College 60
No. 647, L.O... 76
Schnelle 9
Weymouth .. 60

For Index to Trade and Miscellaneous Advertisements see page 4.

ABSTRACT OF

A Lecture

ON

SOME COMMON ERRORS IN THE DIAGNOSIS OF NERVOUS DISEASE.

Delivered at the Medical Graduates' College and Polyclinic on Nov. 3rd, 1913,

By S. A. KINNIER WILSON, M.D. Edin., M.R.C.P. Lond., B.Sc.,

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Gentlemen,—The comparative neglect of the study of nervous disease by student and practitioner is not infrequently excused on the ground of the supposed "difficulty" of nervous symptomatology. But in the opinion of those who have familiarised themselves with the subject nervous phenomena are not in reality difficult, however complex they may be. There appears to exist a certain confusion in the minds of some in this respect. Complex things are combinations of simple things, and if the attempt is made in methodical fashion to unravel the symptoms of a case of nervous disease its "difficulties," so-called, will be found rather to consist of "complexities" which can readily be reduced to lower terms. For the study of nervous disease is essentially a logical study. Effect follows cause so inevitably, the exteriorisation of a nervous lesion is seen in a train of signs and symptoms as a rule so unmistakable, that exact diagnosis, even minute diagnosis, is a commonplace of neurological practice. A lesion in the distribution of the posterior inferior cerebellar artery, though its extent in any direction be less than 1 centimetre, produces a symptom-complex as easy of recognition as that of mitral stenosis. The symptomatology of an extracerebellar tumour is such that the satisfaction of the surgeon on finding it at operation is mild compared with the physician's surprise if it is not found. Although, no doubt, the subjective symptoms of which a patient with nervous disease may complain are probably capable, in a given case, of more than one explanation, there can be no material dispute as to the interpretation of objective signs, if and when such are obtained. In this respect the study of diseases of the chest, to take but one example, is, in my opinion, really difficult as compared with diseases of the nervous system.

The secret of success in the diagnosis of nervous disease is the method of examination. A working acquaintance with the main facts of nervous anatomy and physiology and an adequate knowledge of the systematic and systematised procedures employed in the investigation of nervous cases will enable the practitioner to "run over" the nervous system of a patient with surprising ease, and in the great majority of cases with a definiteness and certainty of result calculated to evoke a venial enthusiasm. It is true that many examinations demand much time, if they are to be complete, and it is also true that ambiguous and anomalous cases may humble the lightning diagnostician to the dust, but the fact remains that, speaking generally, neurological diagnosis can reach an exactness of localisation not always vouchsafed in the investigation of other systems.

It is no part of my object at present to discuss methods of examination; knowledge of these may be assumed. It will be more profitable if we endeavour to illustrate some of the common errors that occur in neurological diagnosis, and to ascertain in what manner they may arise.

Differentiation of "Organic" and "Functional" Cases.

At the outset the practitioner is confronted with the importance of distinguishing between two main groups or categories of cases, denominated respectively "organic" and "functional"—a description sanctioned by long usage, which, nevertheless, has not much to commend it. I had the honour of being the last house physician of Dr. Charlton Bastian at the National Hospital, and I remember how on one occasion he asked if any new cases had been admitted under his care. On my replying "Yes, an ordinary case of functional fits," he said: "Did you ever see a fit that was not 'functional'?" and the rebuke was well merited. Hidden as it almost always is from the eye, an organic nervous lesion can only reveal itself by a disturbance of function, and in this sense the distinction between "organic" and "functional" is meaningless. Sir William Gowers used to impress on us the desirability of employing in preference the terms "structural" and "nutritional," and these are undoubtedly less objectionable. Already there are indications that in many ways the distinction is breaking down, but at present it is still probably the best plan to continue to classify nervous diseases into these two main groups, for all must have a fairly clear idea of what is meant thereby.

Hemiplegia.

Now, certain common errors of diagnosis arise from a failure to differentiate between the two. Hemiplegia, for an instance, is a nervous condition with which the practitioner is constantly being called on to deal, and, as a rule, a case of organic hemiplegia is not missed, especially if the onset is sudden and associated with unconsciousness. But, more particularly after accidents, the sudden development of hysterical hemiplegia is no rarity, and as the prognosis and treatment of the two are very different, accurate diagnosis is essential.

The absence of the epigastric and abdominal reflexes on the affected side, and the presence of an extensor movement of the great toe on stimulating the sole of the foot, are precious signs that postulate organic disease. There may, however, be a flexor response, and in hysteria the abdominal reflex may be diminished, especially if there be any degree of cutaneous anæsthesia. Ankle clonus may help us to reach a definite conclusion. In organic cases it is rhythmical and the excursions are equal; in functional disease it is often highly irregular in time and extent, and the patient seems sometimes to be unconsciously endeavouring to start or to continue the phenomenon by pressing downwards with the forepart of the foot. A consideration of the nature of the paresis or paralysis may prevent an error in diagnosis. The hysterical patient very often shows the condition of defective inhibition of the antagonists. If he is asked, the affected arm being held at a right angle at the elbow, to flex the forearm, it will be found that the tendon of the antagonist of the movement—viz., the triceps—springs into contraction before the flexor or biceps; the antagonistic movement is not inhibited. The same phenomenon is often met with in the leg in a hysterical case. Put the patient on his face and

flex the leg to a right angle on the thigh. Then ask him to extend the limb, when the tendons of the antagonists—viz., the hamstrings—may be seen to contract at once. Within recent years attention has been drawn to a number of other "little signs" of organic hemiplegia, some at least of which are well worth studying for the information they furnish. If the patient lying stretched on the bed folds his arms over his chest and attempts to rise to a sitting position, the thigh on the affected side flexes on the hip and the paralysed limb is lifted off the bed (Babinski). This does not occur in hysterical hemiplegia. If the paralysed leg—for this test it must not be too severely paralysed—can be lifted off the couch by the patient, the examiner then passively lifts the normal limb off the couch also, when the paralysed limb at once falls down to the bed again (Grasset and Gaussel). In hysterical hemiplegia this phenomenon is not obtained. In a normal individual, extended on a couch, it will be found that when he is asked to lift up one leg in the extended position the heel of the other digs itself into the mattress under him. Similarly, if he is asked to press one heel firmly into the bed, the other limb is slightly elevated (Hoover). These phenomena are present also in organic hemiplegia, but never in hysterical hemiplegia. If the toes of the paralysed leg in an organic case are grasped by the examiner's hand and gently but firmly flexed to the sole, the foot will become adducted while the limb is flexed at hip and knee (Marie and Foix). Other tests are applicable to the arm. With the patient recumbent and the shoulder on the paralysed side supported on the bed, the forearm and hand are lifted to a vertical position, the hand being held in exactly the same vertical plane as the forearm. The examiner then quietly slips his supporting hand down from the patient's hand to his forearm, when the former will fall in a flexed position to form an angle of about 130° to 140° with the forearm (Raïmiste). This is due to hypertonus of the flexors of the wrist as compared with the extensors. Again, the patient's arms being extended on the bed, the examiner lifts the affected forearm and hand, the former being pronated and the hand left free. When the forearm is flexed to an acute angle on the upper arm the hand undergoes a movement of adduction so that its long axis becomes perpendicular to the forearm (Neri). These two signs have been demonstrated to occur even when the hemiplegic patient is still in the unconscious stage after an apoplexy, and they are not found in functional disease.

Disseminated Sclerosis.

Another very common nervous disease is disseminated sclerosis, and its earliest manifestations are frequently mistaken for purely "functional" symptoms. When a patient complains of transient amaurosis, or a fleeting diplopia, or of paræsthesiæ in a limb or limbs, organic signs—i.e., objective changes in ocular movements, objective alterations in sensibility or in the reflexes—may be conspicuous by their absence. Mistakes may therefore at first be unavoidable. One of the earliest objective changes is a diminution in one or other abdominal reflex, and this may prove of value in diagnosis: loss of tone in the sphincter iridis as evidenced by failure of the pupil to remain contracted in the presence of the stimulus produced by light is another not infrequent early symptom. The abdominal reflexes may be diminished or absent, though there is no ankle clonus and no extensor response. The classical picture of multiple sclerosis drawn by Charcot is indeed rather infrequent than otherwise, and the practitioner should be prepared for widely varying types of the affection, depending on the site in the nervous system that happens first to be selected by the morbid agent. Regression of symptoms and their reappearance after a time in the same or in a different region of the body are certainly suggestive of this disease. Giddiness is often quite an early sign in disseminated sclerosis. I know of a case occurring in a domestic servant, where the earliest symptom was a tendency on her part to tittering when waiting at table; this subsequently developed into fits of uncontrolled laughter on minimal provocation.

Myasthenia Gravis.

Myasthenia gravis is no doubt a comparatively rare nervous disease, but it is a serious one, and its early symptoms are often mistaken for those of a purely "functional" condition. It is the notable variability in the symptoms which suggests to the physician that a voluntary element must be present and thus leads him astray. When a patient remarks that the weakness in articulating, biting, chewing, swallowing, of which she may complain, the tiredness of the muscles which she feels after any exertion, in walking, doing her hair, and so on, are always relieved by a few minutes' rest, the practitioner should keep myasthenia ever in mind. Not merely the subjective symptoms but also the objective signs are curiously variable. A diplopia or an ophthalmoplegia may on examination vary almost from day to day; this polymorphic element is of diagnostic significance. What are really little short of tragedies have been known to occur during the treatment along "functional" lines of cases of myasthenia gravis.

NEURASTHENIA, "VASO-VAGAL ATTACKS," AND EXHAUSTION PSYCHOSES.

In dealing with the large group of neuroses and psychoneuroses, it is desirable that the physician should be on the alert. Not a few important morbid entities have been thrown, without labels, into the capacious wastepaper basket of neurasthenia, but the practitioner who cares to search and scrutinise will be amply rewarded. What, in my experience, is an all too common mistake is the failure to separate that class of cases variously known as cardiac neurasthenia, pseudo-angina pectoris, "nerve-storms," but best described by the appellation "vaso-vagal attacks." These attacks are allied both to epilepsy and to migraine, and are almost certainly due to instability of the vagus nucleus in the medulla and the vaso-motor centre in juxtaposition. As a result the patient complains of attacks of difficulty in breathing, a suffocating feeling in the throat, palpitation, hot flushes, cold waves, perspiration, shivering, nausea, and an epigastric sensation, and often, also, an indescribably distressing sensation of impending trouble, of fear, even of imminent death. It is quite true that any or many of these symptoms may occur as an episodic syndrome in the course of either functional or organic nervous disease, but in the form above particularised they are periodic and but slightly varying, and their recognition is a matter of great clinical importance. They should always, as far as practicable, be differentiated from ordinary neurasthenia.

From neurasthenia, also, the group of exhaustion psychoses should be separated, and the discriminating physician will avoid the mistake of confounding

the two. I am not likely to forget the unpleasantness of being informed that a patient whom I had seen and whose case I had diagnosed as neurasthenia, giving a confident prognosis of certain and early recovery, was removed to an asylum 48 hours later as a prologue to a long story of tedious and protracted confusional insanity. Defective memory, confusion of thought, disorientation, in particular evidence of hallucinations and a peripheral anæsthesia to the stimuli of pin-pricks, are points in the differential diagnosis of material value. The peripheral anæsthesia in this case was afterwards demonstrated to me by the asylum officer; in ordinary neurasthenia it is never found.

INTRACRANIAL CONDITIONS.

Before proceeding to a consideration of spinal and peripheral nervous diseases in which liability to mistake is an everyday occurrence, let me briefly refer to one or two more organic intracranial conditions that are germane to our subject of this afternoon. Occasionally one meets with cases of hemiplegia of a progressive nature, developing over weeks or months. Even though optic neuritis be absent in such cases, as it frequently is, the possibility of their being cases of cerebral tumour should always be entertained. Where the symptoms are slow, though definitely progressive, the results of surgical intervention are sometimes very successful.

It is desirable to recognise the signs of cortical irritation in the motor area when they occur. Should the twitching be local, not spreading over the whole of one side of the body, or followed by a generalised seizure and unconsciousness, it may be mistaken for a peripheral spasm, or even a "functional" disturbance. Occasionally the differential diagnosis is far from easy. The late Dr. Beevor used to tell an instructive story of a lady who suffered for no less than 15 years from involuntary twitching of the left lower extremity, of a few minutes' duration, to which she became so accustomed that, no matter where she happened to be at the time, the onset of the attack merely elicited from her the complacent remark: "There goes my old leg again!" Eventually, however, operation revealed an isolated tumour confined to the leg area of the motor cortex. The twitching in a Jacksonian case, if the hand be involved, will be found as a rule to commence either in the forefinger and thumb or in the ulnar fingers, not indiscriminately in the hand as a whole.

It is important to remember that the Argyll-Robertson phenomenon, or reflex iridoplegia, is not necessarily indicative of preceding syphilis, however common it be as a sequel to that affection; mistakes may arise when this is forgotten. The Argyll-Robertson pupil may occur in a typical and unmistakable form from lesions in the neighbourhood of the anterior corpora quadrigemina and third ventricle, more particularly in tumours of these regions. Occasionally, too, the pupils are fixed—i.e., inactive to light and accommodation, from lesions of the same areas, by no means necessarily syphilitic.

AFFECTIONS OF THE SPINAL CORD.

Amongst the common nervous affections of the spinal cord in the diagnosis of which errors readily occur mention may first be made of tabes dorsalis. The practitioner is put off the scent when the patient obscures the real nature of the early symptom of lightning pains by calling them "rheumatic." Not infrequently visceral crises—e.g., gastric crises—are met with at an early stage, and their real significance escapes the physician who does not think of testing the pupils or the knee-jerks. Such cases have drifted into the surgeon's hands as a result of incomplete examination.

The Charcot arthropathy of tabes may also lead the practitioner astray, but its painless nature and associated cutaneous or deep sensory diminution or loss should suffice to obviate the possibility of mistake. Loss of sexual desire and power should never be lightly dismissed as merely of neurotic or neurasthenic origin; it may be the earliest indication of organic disease of the lower cord or cauda equina roots. The presence or absence of the bulbocavernosus reflex is of considerable significance in this respect. Pains that radiate round the body on one or other side, or both, may be of notable diagnostic importance, and the physician must not deceive himself into seeing no further than the abdomen because the pain is ultimately referred to some area on the anterior aspect of the trunk. I have known of a case of sarcoma of the spinal cord, with radiating root pains, operated on first for appendicitis; secondly, for chronic intestinal obstruction; and thirdly, for exploratory purposes, not further defined. Any and all of us are liable to make mistakes, but he will commit the fewest who is best capable of taking a wide and comprehensive view of the cases under his care.

There is a common liability to err in the diagnosis of certain muscular atrophies, to only one of which is there time to refer at present. It is highly important to recognise the differences between the atrophy of progressive muscular atrophy and that of cervical rib. In the former case the wasting is of a "global" type—i.e., it affects, say, the thenar eminence as a whole, without selecting any particular muscle: there is gradual and progressive wasting of the whole group. In cervical rib, if muscular atrophy is present at all, as it frequently is, the physician will find that in a large number of cases the wasting is partial and selective, the abductor pollicis, opponens pollicis, and flexor brevis pollicis being involved, while the rest of the thenar eminence escapes. The result is the formation almost of a shelf of muscle, well seen when the thumb is abducted, constituted by the distal portion of the thenar group. I believe this distinction to be of high diagnostic value; its therapeutic importance is obvious.

PERIPHERAL NERVOUS DISEASES.

At the risk of being wearisome I must allude, in closing, to an extremely common error met with in the class of peripheral diseases of the nervous system. No expression is more frequent in the mouths of out-patient frequenters of a nerve clinic than "neuritis"; no word falls more glibly from their lips, but no term is more grossly misused and misunderstood. I am assured by a friend that the superintendent of a sanatorium in Switzerland to which many English patients resort makes it a routine practice to ask them whether they suffer from "neuritis," and he is rarely, if ever, disappointed. The subject of pains or paræsthesiæ in a limb, say the arm—"brachial neuralgia"—is curiously complex. The majority of cases of so-called neuritis, when tested, will be found to have brisk tendon reflexes in the affected arm, thus

ruling out organic neuritis at once, for one of the cardinal signs in true neuritis is diminution or absence of the tendon reflexes. Further, such cases rarely, if ever, exhibit any objective diminution or loss of cutaneous or deep sensibility, even in the periphery of the limb. What, then, is the explanation of these conditions described, *faute de mieux*, as "neuritis"? Some, there is no doubt, are instances of reflex neuralgia secondary to joint-changes of an arthritic nature, just as is the secondary "sciatica" of chronic changes in the hip-joint. Others, again, belong to the class of acroparæsthesia, a condition of usually bilateral painful paræsthesiæ in the arms and hands, often associated with "drawing" and stiffness of the fingers and of the arm musculature generally. The pathology of these states is possibly an arterio-sclerosis of the vasa nervorum resulting in ischæmia of the nerve trunks. Other cases of "neuritis" certainly belong to the category of cervical rib. As a rule in these cases the patient complains of paræsthesiæ or pains which radiate down the forearm and are referred either to the radial or to the ulnar side of the hand and fingers, and it is of practical importance to determine the exact distribution of the paræsthesiæ for this reason, whether in all the fingers equally or in any particular finger or fingers. If the paræsthesiæ are in the middle finger mainly, the condition is much less likely to be a cervical rib than a true acro-paræsthesia. Occasionally it is the first dorsal rib which gives rise to the symptoms, owing to some malformation or malposition. Still other cases, I believe, are comparable to trigeminal neuralgia and occipital neuralgia—i.e., they may, *ex hypothesi*, have for a pathological substratum a sclerotic affection of posterior root ganglia, just as in facial neuralgia the Gasserian ganglion is sometimes found at operation to be firmly bound by adhesions and to be diminished in size. There is also the wide and indefinite class of "rheumatic" affections, "rheumatic neuritis," "gouty neuritis," and so on. Some at least of these cases must be placed in the rubric of myositis, or neuro-myositis. Small nodular and tender points may be found on deep palpation in the muscles of the neck, shoulder girdle, or arm. Occurring as they do in the muscles of the neck, head, and scalp, they are one of the causes of headache and neuralgia that are too apt to escape recognition. Once more, "neuritis" occurs in those who suffer from occupation neuroses; in writer's cramp, telegraphist's cramp, and so on, the lesion, whatever its nature be, is central and not peripheral. There is no neuritis in the ordinary acceptation of the word. On the other hand, where intermittent pressure on a part is prolonged over months or years an occupation neuritis may arise with the consequent production of muscular atrophy, and often also with paræsthesiæ and sometimes objective loss of sensibility.

It is a platitude to say that fewer errors arise from ignorance than from incomplete examination, but the fact remains. If we endeavour to conduct a methodical and systematic investigation of all our cases, however complex they be, we shall soon learn to distinguish the essentials. Dr. Hughlings Jackson used to say that truth often arises from error, but never from confusion. Our errors, therefore, if we allow ourselves to learn from them and are capable of profiting by experience, lead us on to fuller knowledge and to a higher level of professional attainment.

An Address
ON
CANCER OF THE PROSTATE.

Delivered before the Nottingham Medico-Chirurgical Society on Dec. 4th, 1913,

BY P. J. FREYER, M.A., M.D., M.CH.,
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GENTLEMEN,—I have in the first place to thank you for the honour you have paid me in inviting me here this evening to deliver an address before what is, I believe, one of the oldest medical societies in the kingdom. The subject I have chosen for my address is Cancer of the Prostate. Whether malignant disease is on the increase, or whether its recognition and registration are more accurate than formerly, the fact is patent that at the present time cancer prevails to an appalling extent amongst all classes of society. It is, then, the duty of each of us to contribute what we can to the common stock of knowledge, particularly in regard to its successful treatment. I have during the past 10 or 12 years had unusual opportunities of studying one of the most painful forms of this disease—viz., cancer of the prostate—so that I hope no apology is necessary in inviting your attention to this subject this evening.

It is now recognised that cancer of the prostate is a much more common disease than was formerly imagined. Writers vary much in their estimates of its incidence in comparison with that of benign hypertrophy of the gland. I have therefore had my note-books for the past 11 years examined and find that amongst 1276 cases of enlargement of the prostate for which I have been consulted in private practice during that period, of every one of which I have kept a careful note, 1105 were diagnosed as benign enlargement of advanced age, and 171 as cases of malignant disease of that organ, or 13·4 per cent. of the whole. These latter were all regarded by me as cancer, with the exception of one sarcomatous case. I have not attempted to go into the statistics of my hospital cases, as most of them were seen in the out-patient department, of which the records are imperfect; but I may say that I only remember having come across three or four cases of sarcoma of the prostate in my life, so that cancer is the predominant malignant disease of this organ.

SYMPTOMS.

The symptoms of malignant disease of the prostate are similar to those of adenomatous enlargement of that organ of declining years, with other symptoms superadded. Let me recall briefly the symptoms of adenomatous enlargement, or, as it is commonly called, hypertrophy of the gland. They are: increased frequency of micturition, as a general rule more marked at night when the patient is lying down than in the day time when he is going about; hesitation or difficulty in starting the stream; diminution in the strength of the urinary flow, which, instead of being projected in the normal curve, falls almost directly downwards from the meatus by its own weight without any impetus from the bladder; the patient strains to propel the urine onwards, but his efforts have little or no effect in strengthening the stream, but on the contrary, the straining frequently arrests the flow

temporarily; dribbling of urine towards the end of micturition; intermittency of the flow, as a rule due to the ball-valve action of the outgrowth in the bladder. These symptoms are unaccompanied by pain in the earlier stages of the malady; but, as the growth of the organ progresses, retained urine increases in quantity, causing over-distension of the bladder, and suprapubic pain of a dull, aching character sets in. These symptoms are, as a rule, very slow in their progress, gradually increasing in intensity over a period of years, and finally culminating in retention of urine, necessitating the introduction of the catheter for its relief.

Now, if a patient consults us, giving a history similar to that just described, and if he tells us that *the symptoms have run their course rapidly in a few months only* instead of as many years we should at once begin to suspect the existence of malignant disease of the prostate, particularly if his age be less than 50 or more than 70 years. If, in addition, we ascertain that during this short period of months the patient has suffered from progressive loss of flesh, a feeling of lassitude, debility, and undue fatigue, and failure of appetite; if, further, he suffers from pains in the sacrum, loins, one or both thighs, along the course of the urethra or in the perineum, and if he has pain and soreness in one or both buttocks when sitting down—pains which the patient will probably attribute to rheumatism, but which, no doubt, are due to pressure on the nerves—our suspicions become more pronounced. And if the typical cachexia be also present we may almost conclude, before making a physical examination of the prostate, that we have to deal with malignant disease of that organ. I find that in cases of this kind the tongue is not infrequently glazed, red, and dry, and that the urine is of a pale colour and low specific gravity—conditions that are met with in cases of ordinary benign enlargement of the prostate only when there has been long-continued backward pressure on the kidneys from great over-distension of the bladder, thus leading to incipient uræmia. It was formerly held, and I see that this idea is still clung to by many medical men, that profuse hæmaturia is more or less typical of cancer of the prostate, in contrast with adenomatous enlargement of that organ. Not only is this not the case, it is the reverse of the truth. Hæmaturia, even profuse hæmorrhage into the bladder, is not an infrequent incident in connexion with adenomatous enlargement of the prostate, particularly during the period of habitual employment of the catheter, whereas hæmorrhage is a very rare accompaniment of malignant disease of that organ, and, as a rule, only when the disease is far advanced and ulceration has taken place into the bladder or urethra, though occasionally cases are met with in which a few drops of blood are passed immediately before micturition or even independently of micturition, due no doubt to congestion or slight ulceration of the growth in the prostatic urethra. There may also be a slight show of blood immediately after micturition, which would indicate ulceration of the growth at the neck of the bladder or possibly of the trigone invaded by the growth.

PHYSICAL EXAMINATION AND CHARACTERISTICS.

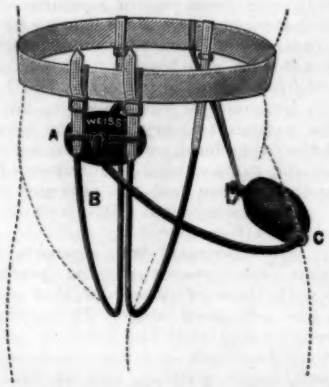
We now come to the physical examination of the prostate. The precaution having been taken to have the bowels well opened, the patient is placed in the supine position in bed or on a couch; the catheter is introduced to evacuate the bladder and ascertain the quantity of residual urine, for without the complete evacuation of the contents of the bladder no accurate estimate of the physical characteristics of the prostate can be made. And here let me remark that in the introduction of the catheter most useful information from a diagnostic point of view will frequently be obtained, for in the majority of cases of benign enlargement of the prostate no difficulty or pain is experienced in introducing a coudé catheter, the soft, spongy adenomatous walls of the prostatic urethra yielding before the gentle onward pressure of the instrument. When difficulty is met with in these cases it is due to distortion of the course of the urethra, as a rule caused by a median outgrowth of the gland in the bladder. In malignant growth of the prostate, on the other hand, the catheter meets with sudden resistance in the prostatic urethra, caused by its dense, hard, unyielding walls, and the procedure will be accompanied by pain and probably a little bleeding. The forefinger of the right hand, well lubricated, is introduced into the rectum, slowly and gently dilating the sphincter ani, and no attempt at palpation of the prostate should be attempted till the finger has passed in to its full length. Sweeping the finger from side to side across the anterior aspect of the rectum, if we encounter in the region of the prostate a generally rounded tumour, divided into two lateral parts by a furrow in the mesial line, the surface of the whole being smooth, the consistence being soft, or somewhat dense but elastic to the touch, and, most important of all, movable from side to side and from below upwards from the surrounding structures, we know that we have to deal with the ordinary adenomatous enlargement of the gland amenable to enucleation. This examination will be painless, attended merely by the discomfort due to the presence of the finger in the rectum. Unless the patient be very stout, by placing the fingers of the other hand on the abdomen above the pubic arch and approaching the fingers of the two hands together we can feel the enlarged gland and move it about, somewhat like a subinvoluted uterus, but to a less extent.

Let us now contrast the characteristics of adenomatous enlargement of the prostate just described with those of cancer of that organ in a more or less advanced stage. In carcinomatous enlargement we find that the prostate is hard—of almost stony hardness in some cases—with occasionally soft, boggy patches, due to broken-down tissue. The outline will, as a rule, be very irregular, the lobes being ill-defined and the median groove partially or wholly obliterated. The surface will, as a rule, be nodular or ridged with deep intervening irregular furrows. In a few instances, however, I have found the cancerous prostate smooth and rounded like an ivory ball. Not infrequently we find that the lobes are unequally affected, or that the disease for the time being is entirely confined to one lobe. But the most important feature for diagnostic purposes is the immobility of the prostate from the surrounding structures. The palpation of the prostate in the course of the examination is attended by much pain. Bimanual examination will emphasise these features, but, as a rule, no great prominence of the organ will be felt in the bladder, the growth invading the adjacent tissues and extending to the vesiculæ seminales and the trigone, but scarcely ever presenting any marked prominence in the bladder. When the bladder is opened suprapubically

in a case of this kind, as we shall find later on will frequently be necessary for the purpose of establishing a permanent fistula, we generally find that the inner orifice of the urethra is contracted and undilatable, situated in the centre of a hard, nodular mass, scarcely prominent in the bladder, and feeling like an unripe custard-apple. If the disease be advanced the lymphatics, particularly the iliac, inguinal, and lumbar glands, will be involved, and sometimes I have found the surface of the tumour studded beneath the rectal mucous membrane with tiny hard glands, like sago grains. I seldom employ the cystoscope in such cases, as its introduction is difficult and painful, and, as a rule, unnecessary for diagnostic purposes.

TREATMENT.

Now, it is quite impossible to enucleate suprapubically, or by any other method effectually remove, a cancerous prostate in this advanced stage. We can only confine ourselves to ameliorative treatment, the catheter being employed as long as it can be introduced without difficulty or pain. When its use is attended by pain, difficulty, or bleeding, we must have recourse to suprapubic cystotomy, with a view to establishing a permanent fistula through which the urine flows into a urinary apparatus, the patient being thus enabled to go downhill with the least possible discomfort. I need scarcely add that when the malady is accompanied by pain the free administration of opiates, particularly morphia hypodermically, should be had recourse to. This simplified apparatus (see figure)



Sketch of apparatus. A is an indiarubber flange, to which are affixed two loops, two perineal straps, B, coming from waist-band at back passing through the loops in flange A and buckling to waist-band in front. An indiarubber catheter of suitable size (usually No. 16 English catheter gauge) is passed through the flange A into the bladder; the other end is attached to urinal, C, which is suspended from the waist-band about 3 inches below the level of the opening into the bladder.

which I show you is that which I now employ. It is manufactured for me by Weiss, and has been brought to its present state of comparative perfection by the gradual improvements on the more clumsy apparatus formerly employed, at the suggestions of patients themselves rather than through any inventive genius on my part.

Radiotherapy is useless in cancer of the prostate, a statement that is borne out by the results, or rather want of results, in patients from my own practice that have been submitted to this treatment, as in those of others that have come under my notice.

We must be extremely reserved in our prognosis as to the period of longevity in cases of malignant disease of the prostate. Some patients go downhill rapidly in the course of months, as a rule through general infection of the system; others live for years, some for many years, in comparative comfort, going about their business as usual and able to take active exercise. Many of them put on flesh rapidly, strange to say, after the establishment of the suprapubic fistula, probably mainly due to the relief to the backward pressure on the kidneys, a circumstance that should decide us not to postpone the establishment of the fistula for an unduly long time.

I am of opinion that a prostate attacked by malignant disease previous to its undergoing adenomatous enlargement is rarely, if ever, capable of enucleation suprapubically by my method of dealing with hypertrophy of the prostate or of being effectually removed by any other method, for the simple fact that by the time the symptoms declare themselves the disease has already passed through the capsule of the gland and invaded the adjacent structures.

When, however, cancer supervenes on, or is due to degeneracy in, a previously enlarged adenomatous prostate, as we now know very frequently happens, and the patient comes under observation whilst the prostate is still movable and the adjacent structures uninvolved—that is to say, whilst the malignant disease is still confined within the capsule of the gland—the prostate can, and should be, enucleated, my experience of operation under such conditions being most favourable, as the details of the cases that I shall presently place before you will show. It will sometimes be impossible to give a definite diagnosis of malignancy in such cases before the removal of the prostate, though the presence of hard nodules in the gland, combined with the rapid progress of the symptoms, will arouse strong suspicions in the surgeon's mind, suspicions which, I need scarcely add, should be communicated to the patient's relatives before operation is undertaken.

NOTES OF CASES.

CASE 1.—This patient, aged 63, I saw in consultation with Dr. Horace Duncan, London, on March 21st, 1904, for prostatic symptoms which had existed two years. A month previously he had retention of urine; a silver catheter was introduced and tied in for 48 hours by another surgeon. After this the catheter was passed night and morning. For the last few days the catheter had been abandoned, but there was intense frequency of micturition day and night. I found 6 ounces of residual urine containing pus and mucus. The prostate was found enlarged to the size of a tangerine orange, hard at parts, but movable from the surrounding tissues. I considered the case one of malignant disease of the prostate, but felt that the gland could be enucleated.

On March 26th, Dr. Duncan assisting, I enucleated with considerable difficulty the prostate, which, however, came away entire, leaving a smooth cavity behind. The prostate, which weighed 1¼ ounces, was dense throughout, with hard nodules at the base and left side.

Pathological report.—"The prostate shows early malignant changes. The condition is not advanced, and it is possible that all the malignant growth may have been removed."

Everything went well with the patient till April 6th, when sudden dyspnœa and collapse set in, due evidently to thrombosis of the left lung. Dr. Cæsar Hawkins then attended in consultation. Next day the patient was apparently out of danger, and continued to do well till April 14th, when hæmoptysis set in, from which he was much exhausted. After this he steadily improved. On April 19th urine was passed by the urethra and the suprapubic wound was dry next day. On June 11th, 1905, I had a note to the effect that this patient was in perfect health, untroubled by any urinary symptom; he had grown stout

and strong since the operation. In January, 1906, he had some hæmaturia, thought to be due to lifting a heavy weight, and this was followed by frequency of micturition and scalding during the act. On Jan. 22nd, assisted by Dr. Duncan, I made a cystoscopic examination. There was no recurrence of the growth, merely local congestion and pin-head ulcers on the left side of the bladder—the appearance of subacute cystitis. This was treated by washing out the bladder with weak solutions of nitrate of silver and the internal administration of urotropin, &c. The symptoms passed away in a few weeks. Since then he has been troubled by no urinary symptoms. I meet this patient socially from time to time; he paid me a friendly visit a fortnight ago. He is now, nearly 10 years after operation, in excellent health, able to enjoy life, and untroubled by any urinary symptom.

CASE 2.—This patient, aged 69, who consulted me on Sept. 21st, 1904, on the advice of Dr. E. J. Cave, of Bath, had suffered from prostatic symptoms for four or five years; the catheter had been employed for three years, and during the last 18 months the patient was entirely dependent thereon. His penis had been amputated eight months before for epithelioma. I passed a coudé catheter No. 7 with some difficulty and drew off 14 ounces of urine containing pus and mucus. The prostate as felt per rectum and bimanually was of the usual adenomatous type and presented no signs of malignancy. On Sept. 26th I enucleated the prostate, which presented a gutter-shaped outgrowth in the bladder, entire, some difficulty being experienced owing to adhesions along the neck of the bladder. It weighed 2½ ounces. The prominent outgrowth in the bladder, as also the main portions of both lateral lobes towards the triangular ligament, were adenomatous, but these two portions were united by a narrow neck composed of a band of carcinomatous tissue of the hard scirrhous type, encircling the urethra at this situation. The suprapubic wound was closed on Oct. 21st, after which date his urine was retained and passed naturally.

In November, 1905, I removed a small warty growth from his right temple, which proved to be an epithelial growth. Beyond this he had no recurrence—if recurrence it was—of malignant disease. I heard periodically from this patient and saw him on several occasions, for he was naturally anxious lest a recurrence of the malignant disease should take place, but to the day of his death, which took place on June 8th, 1910—some six years after the removal of his prostate—suddenly from heart disease, he was untroubled by any urinary symptoms.

It is impossible to say whether the cancer of the prostate arose concurrently with the epithelioma of the penis or if it was secondary to this affection. If the latter, then it is the only instance that has occurred in my practice in which cancer of the prostate supervened on cancer of any part more distant than the rectum, though I have come across several instances in which the prostate was invaded secondarily to the rectum.

CASE 3.—On Oct. 20th, 1904, I saw in consultation with the late Sir Alfred Cooper a man, aged 64, who had for two years suffered from gradually increasing frequency of micturition so that latterly he had to urinate every two hours by day and night, in spite of the fact that he employed the catheter every night and frequently in the morning. There was a sense of fulness and uneasiness in the perineal region For some months he had suffered from a gleety discharge which came from the prostate, and for which there was no venereal cause. There was no stricture of the urethra. He had never seen blood either in the discharge or in the urine. I drew off five ounces of residual urine containing muco-pus. Per rectum the prostate felt enlarged to the size of a large walnut; it was irregularly bilobed, with hard nodules in its interior, but quite movable; it could not be felt bimanually, and no glands could be felt enlarged. Cystoscopic examination revealed only slight prominence of the prostate in the bladder. The inner orifice of the urethra was irregular instead of presenting the usual V or U-shaped slit characteristic of moderately enlarged adenomatous prostate. Till recently the patient had led an active life apart from his profession in hunting, shooting, &c. Malignant disease of the prostate was feared, but as the gland was movable in regard to the adjacent structures I advised operation. This I accomplished on Nov. 12th, Sir A. Cooper assisting, with some difficulty, but the prostate was enucleated entire in its capsule, weighing 1½ ounces.

Pathological report.—"This tissue cut through the hardest part of the prostate is undoubtedly malignant. It is a columnar-celled cancer of the scirrhous type—i.e., the tubules lie in alveolar spaces within the dense fibrous stroma. Solid epithelial masses exist in the latter quite apart from the tubules, thus proving that the active proliferation of the lining epithelium of the latter is a malignant process."

The patient made an uninterrupted recovery. He passed some urine naturally on Nov. 26th, and entirely in this way on and after Nov. 29th. On Dec. 10th he left the surgical home able to retain and pass his urine as well as he ever did. Since then he has had no urinary symptoms and has continued in active persuit of his profession. On June 16th, 1913—nearly nine years after operation—he wrote me: "I am happy to say I am well and able to enjoy life. Old age is so far as I am concerned unaccompanied by any of the discomforts so frequently accompanying the latter years of life." And three weeks ago I again heard from him that he was quite well.

CASE 4.—This patient, aged 79, was admitted to St. Peter's Hospital on May 7th, 1906, with intense frequency of micturition and continual dribbling of alkaline urine, which had lasted two months, previous to which he complained of no urinary trouble. The bladder being distended to the umbilicus, a catheter was introduced and slow drainage adopted for three days. After that the catheter was passed at intervals, the patient being unable to void any urine naturally. The prostate was enlarged, flattened from side to side, hard throughout, nodular at parts, and only partially movable. The glands in both groins were enlarged and hard. On May 16th I enucleated the prostate entire in its capsule with ease, the operation lasting three minutes only.

Pathological report.—"The prostate weighed 2 ounces, was very hard at parts, and microscopic sections showed that the enlargement was of a malignant character."

The operation was well borne. The patient passed some urine naturally on June 4th, and the suprapubic wound was closed on June 14th. He was discharged on June 17th. On June 30th he presented himself at the hospital, able to retain and pass his urine naturally as well as he ever did. There was no residual urine, the bladder emptying itself completely. On Nov. 20th, 1913, seven and a half years after the operation and in his eighty-seventh year, the patient writes: "I am pleased to say I am in the best of health and have been ever since my operation. If you like to see me I will willingly come if you name a time convenient to yourself." I saw this patient on Nov. 24th in excellent health.

CASE 5.—On May 10th, 1907, I was consulted by a man, aged 64, who for two years had suffered from intense frequency of micturition, with intermittency of the urinary stream. Latterly the urine dribbled away at night, so that he had to wear a urinal. Some years previously he had had a paralytic stroke with hemiplegia, and I thought that possibly this might have left some weakness of the sphincter muscles behind He had suffered from gout for ten years, and some of his joints were thickened. There was no pain or hæmorrhage. I drew off 9 ounces of residual urine which was fairly clear, with a trace of albumin. The prostate was fairly enlarged per rectum, bilated, smooth, and fairly movable, but the right lobe was distinctly hard and nodular. It was scarcely felt bimanually. No glands could be felt enlarged. His general health was indifferent. Malignancy was suspected.

On May 15th I enucleated the prostate entire with considerable difficulty owing to its adhesion to the adjacent structures. The gland was of the size of two walnuts placed side by side, and distinctly hard at parts.

Pathological report.—"Over a considerable area of the section the tissue of the prostate is infiltrated by irregularly proliferating glandular spaces lined by actively multiplying epithelium. The appearances are those of adeno-carcinoma in an early stage."

The suprapubic wound was slow in healing, but on and after July 7th the whole of the urine was retained and passed naturally. He has since remained in fairly good health, and on July 11th, 1913—more than six years after operation—he wrote: "My grateful thanks to you; my bladder condition is quite satisfactory."

CASE 6.—This patient, aged 63, consulted me on April 10th, 1908, alarmed because he had passed much clotted blood during the previous few days. I had seen him once before on Jan. 2nd, 1904, for prostatic symptoms. He then had 3¼ ounces of residual urine, but the prostate was scarcely enlarged, so I advised him to use the catheter once daily on going to bed. This he had continued to do ever since, thus getting a good night's rest as a rule. I now found that he had 6½ ounces of residual urine, which contained some blood and pus; the catheter was gripped tightly in passing through the prostatic urethra. The prostate was considerably enlarged, dense throughout, and hard on the left side, but it was fairly movable from the adjacent structures. I came to the conclusion that the case was one of adenomatous enlargement of the prostate degenerating into malignancy.

On April 13th I opened the bladder suprapubically, Mr. C. Carter Braine giving the anæsthetic. The right lobe of the prostate was felt somewhat prominent in the bladder like a papillomatous growth. The gland was enucleated entire, some difficulty being encountered owing so its being unusually adherent to the surrounding tissues.

Pathological report.—"The right lobe shows a lot of interstitial hæmorrhage in its upper pole, and radiating from this is a good deal of inflammatory infiltration. Most of the gland tissue in this lobe is benign, but degenerate in one tubule of the right lobe, the epithelium being several layers in thickness. The left non-hæmorrhagic lobe is the more important, for in it a few of the tubules have taken on undoubted malignant cancerous changes, and this is surrounded with much inflammatory infiltration."

No unfavourable symptoms supervened on the operation, and the case ran the usual course. On May 19th the patient left the surgical home quite well, able to retain and pass his urine as well as ever.

I did not see the patient again till June 5th, 1912, more than four years after. He had kept perfectly well for more than three and a half years, but in January, 1912, he had a nervous breakdown, for which he was under the care of a nerve specialist. During the last three months he had some increased frequency of micturition, and two days previously he had passed a little blood. I made a cystoscopic examination without an anæsthetic, a No. 22 cystoscope passing quite easily. There was no stone and no recurrence of the growth, but the bladder was congested at the base and there were minute particles of phosphates adherent to the mucous membrane. The cystitis yielded to the usual remedies.

CASE 7.—On Jan. 4th, 1910, I was consulted by a man, aged 57, who had just arrived from abroad for that purpose on the advice of his medical attendant. For some years he had suffered from rheumatism, the pains affecting mainly his thighs. Two years previously he had felt stiffness in his right groin. In April, 1909, he had intense frequency of micturition with pain in the same groin and deeply in the perineum. His medical attendant had examined him in November of that year, and found a hard swelling in the left side of the prostate. The patient was sent to consult a urinary specialist, who did not consider the case one of malignancy, but advised removal of the prostate. I drew off 6 ounces of residual urine, which was normal in quality. The right lobe of the prostate was somewhat enlarged, soft, and movable; the left lobe was much enlarged, contained a hard nodule, and was only partially movable from the adjacent structures. I regarded the case as one of cancer of the prostate, but considered that the gland could be enucleated entire though rather adherent on the left side. The patient's general health was good.

On Jan. 6th I enucleated the prostate entire. The enucleation was fairly easy all round the gland and from the triangular ligament, but difficult from the trigone, to which it was very adherent. The operation was well borne, but was followed by much nausea and vomiting for a couple of days.

Pathological report.—"Both sections of this organ show it to be the seat of malignant disease of carcinomatous nature. The malignant cells lie in long columns and alveolar spaces in the fibro-muscular stroma."

The suprapubic wound was healed towards the end of the month and urine was passed naturally, but the wound broke down after a few days, leaving a fistula which repeatedly healed up and broke down again. After consultation with my colleague, Mr. F. Swinford Edwards, the patient was anæsthetised on March 11th, the fistula incised and enlarged, and the inner orifice of the urethra, which was contracted (owing to the adhesions of the prostate to the trigone already described), thoroughly dilated by the finger point. A full-sized catheter was tied in for 11 days. The wound was quite dry on March 28th, and on April 7th the patient left for the country in good health, able to retain and pass his urine normally. I have seen and examined this patient once a year since; he has always been in good health and untroubled by any urinary symptom, and there has been no recurrence of the growth. On Dec. 22nd, 1911, he wrote: "I am keeping wonderfully well." His wife wrote, June 20th, 1912: "I am thankful to say my husband has had a splendid winter and has been better than for years." And on Feb. 15th, 1913, the patient wrote: "I am wonderfully well. I have had a busy winter, working in my office from 9 A.M. to 7 P.M. daily."

CASE 8.—On May 22nd, 1912, I saw in consultation with Dr. H. A. Des Voeux, a man, aged 68, who had suffered from the usual prostate symptoms for three years. Four days previously a catheter had been passed and three pints of residual urine drawn off. The catheter had been used twice daily since then. There was no loss of flesh, appetite, or energy, and no pains were complained of. The prostate was much enlarged, and presented the general aspects of a dense adenomatous enlargement, except that the left lobe was hard and nodular, and that the organ was only partially movable from the surrounding structures. I diagnosed the case as one of adenomatous enlargement of the prostate degenerating into malignancy, and advised that an attempt should be made to enucleate the organ, failing which, that a permanent suprapubic fistula should be established. I may mention that another urinary specialist had been consulted two days previously, and had pronounced the case as one of inoperable cancer of the prostate, and that in consequence the patient and his family were in great distress.

On May 24th, Dr. Des Voeux assisting, I enucleated the prostate as a whole, with some difficulty owing to adhesions on the left side. The operation was well borne; there was no shock and scarcely any bleeding, and the recovery presented no unusual features. Some urine passed per urethram on June 7th, and on June 11th 11 ounces were passed at one effort. The wound was dry on July 25th, on and after which date urine was passed with ease in a full stream, and retained normally. On July 5th the patient motored home, a distance of some 70 miles.

Pathological report.—"The organ as a whole was much enlarged, the enlargement affecting the right lobe more than the left. The right lobe and so-called middle lobe were smooth and soft, but the left lobe was hard, nodular, and fibrous. Sections were cut of all three portions, and also of the central tissue in the neighbourhood of the verumontanum. The great mass of the tissue has the structure of a simple adenoma, and consists of fibro-muscular stroma enclosing numerous large and often dilated alveoli lined by cubical epithelium. In the case of the left lobe, however, the anterior portions show evident invasion of the stroma by small masses and columns of epithelial cells, whose characters and arrangement leave no doubt that this lobe has taken on a malignant nature and has become a carcinoma of the hard or scirrhus type."

I have seen this patient on three occasions since. He is in perfect health, untroubled by any urinary symptom, and can walk and shoot as well as he could in his younger days. Locally there is no trace of recurrence of the disease. On Nov. 7th, 1913, he wrote: "I am really feeling very fit and have been doing a lot of shooting, also fishing, in Norway."

RESULTS OF OPERATION.

Did time permit I could give details of other cases of the same description. Those already described, however, amply prove that if we can enucleate the prostate entire whilst the malignant disease is still confined within its true capsule, we can with every confidence look forward to a perfect cure; and the

operation is attended by no more danger than that attached to the enucleation of a simple hypertrophied growth of the organ.

I could give you details of other cases in which, I regret, the results were not so satisfactory, the malignant disease recurring locally in the adjacent structures, after more or less lengthened periods, leading eventually to contraction of the urethra at the neck of the bladder, necessitating the employment of the catheter or the establishment of a permanent suprapubic fistula. In these cases the disease had evidently invaded the surrounding tissues before the enucleation of the prostate. If the prostate can be enucleated entire, even when unusually adherent to the surrounding tissues, I confess that I feel a strong inclination to accomplish this, and have never regretted doing so. Even should the disease recur, it is a great consideration for the patient to be able in the interval to urinate normally, thus deferring for months or even years the establishment of a permanent fistula, which can always be had recourse to when necessary.

MALIGNANT DEGENERATION OF BENIGN PROSTATIC GROWTHS.

I have in my remarks hitherto dealt only with cases of cancer of the prostate diagnosed as such, or in all probability as such, before operation. It is, however, held by many writers that a very considerable proportion of enlarged prostates regarded as benign adenomata at the time of operation turn out on pathological examination to be of a cancerous nature. This view was, I believe, first propounded by two eminent French authorities—Albarran and Hallé. These gentlemen having examined microscopically a series of 100 prostates, which had all the appearance of being benign, found amongst them 14 cancers, with all the intermediate histological appearances between the pure adenoma and the epithelioma, thus giving rise to the view that the adenomatous transformation of the prostate in advanced age is, in a number of instances, the primary stage of a malignant degeneration. Now, I have had no systematic pathological examination made of what I regarded as benign enlargements of the prostate, considering this as unnecessary except in cases where there was some doubt in my mind as to the nature of the growth. But if the tenets of Albarran and Hallé be applied to the series of more than 1100 supposed benign prostates removed by me in the past 12 years it would indicate that, unknown to myself, I had removed amongst these no less than some 150 carcinomatous prostates. Well, I cannot trace amongst the subjects of the whole of my operations for supposed benign growths of the prostate more than half a dozen instances in which cancer subsequently afflicted these patients. The cancer in these cases supervened at lengthened periods after the operation in organs distant from its site, and the proportion can scarcely be regarded as greater than would normally occur in patients the average age of whom at the time of operation was 69 years. Far be it from me, who have no pretension of being an expert pathologist, to call in question the views of such eminent men as Albarran and Hallé; but if their tenets be true, then my operation of enucleation of the prostate for radical cure of enlargement of that organ, now practised all over the world, must be credited with a far greater benefit to humanity than I could have anticipated.

JACKSON'S PERICOLIC MEMBRANE:

ITS NATURE, CLINICAL SIGNIFICANCE, AND RELATION TO ABNORMAL MOBILITY OF THE PROXIMAL COLON.

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DURING the past year six well-marked examples of this much-discussed condition have come under my observation at Ancoats Hospital, and it is thought that they throw considerable light on the true nature of the membrane. Before describing these cases and discussing their significance some explanatory remarks are necessary.

In a recent article[1] Jabez North Jackson has described how he first encountered the pericolic membrane, and came to regard it as a definite pathological lesion. In 1908 he operated on a woman who suffered from chronic pain in the right abdomen, and at different times had had her appendix and right ovary removed without relief. On opening the abdomen he found a curious filmy transparent membrane extending from the parietal peritoneum of the right flank across the front of the ascending colon to its inner side, and continuous above with the transverse mesocolon. He says, "The membrane did not strike us as analogous to an adhesion in any sense. It looked instead like a new adventitious vascularised investing layer of peritoneum." Shortly after this he came across a precisely similar membrane in a post-mortem examination, which was described by Hall in Jackson's original paper,[2] and gives us the classical picture of the condition. From a point at the level of the hepatic flexure to three inches above the caput coli there spread from the parietal peritoneum over the lateral margin and front of the colon to its medial longitudinal muscular band a thin vascular veil, in which long, straight, unbranching blood-vessels coursed, most of which were parallel with each other. The direction of these parallel vessels was downwards and inwards from the parietal attachment to the ascending colon. It will be seen that this description would apply with considerable precision to all the cases described in the present paper.

Hall considered that the membrane he described was "peritoneum loosened from its close connexion to the abdominal wall and colonic surface by some serous exudate, after which the particular vascularisation and connective tissue banding has occurred as a chronic reaction to irritative influence." In his last paper Jackson[1] states that he has since met with cases of pericolic membrane with wide variations in their attachment, but similar to the above in their general character, and he believes that, while some may be of congenital origin and others the result of colitis, the majority are due to a chronic lymph stasis as suggested by Hall. His statement that "so far we know of no observation of this condition in infancy or childhood" is of interest in view of the fact that two of the cases to be described below were aged 5 months and 8 years respectively.

During the last year or two Jackson's membrane has been the subject of many papers, mostly in the American journals, and the most divergent views have been expressed as to its origin. To quote only a few of the more important authorities, Gerster[3]

holds that the membrane is due to chronic colitis; Pilcher[4] also considers that it is due to chronic mild infection through the gut wall; Coffey[5] states that it "develops during the first few years of adult life and is of bacterial origin. Its development is apparently secondary to stasis accompanying the mobile cæcum." Lane[6] considers that it is a condition acquired in post-natal life and is the result of chronic intestinal stasis and ptosis of the cæcum. He regards it as a protective mechanism designed by Nature to hold the colon up, which may do more harm than good by kinking the gut. Blake[7] describes the membrane as always present and a perfectly normal structure—a conclusion that would seem to be somewhat hard on generations of descriptive anatomists. C. H. Mayo[8] believes that it is due to late rotation of the midgut loop and descent of the cæcum by a process of burrowing down behind the parietal peritoneum. There is no anatomical ground, however, for believing that this view is at all plausible. Finally, Flint[9] and Gray and Anderson[10] have stated that the membrane is a congenital abnormality of the peritoneum.

It is evident that, so long as the views of leading authorities concerning the etiology and clinical significance of the membrane are so widely divergent, the surgical treatment directed to it must be in an unscientific and chaotic state. This is shown to be the case by the fact that operations so various as simple division of the membrane, ileo-sigmoidostomy, excision of the colon, cæcoplication, colopexy, and appendicostomy have all been advocated by different writers.

A study of the following six cases points to the truth of the congenital theory of origin.

CASE 1.—The patient, a girl aged 16, thin, sallow, and of the build known as the *habitus enteroptoticus*, was admitted to Ancoats Hospital on March 16th, 1913, complaining of chronic constipation and pain in the right iliac fossa. There was some local tenderness on palpation over the cæcum, but no rigidity. Diagnosis: chronic appendicitis (?).

Operation.—Ether anæsthesia. The abdomen was opened by a vertical incision through the right rectus. The appendix was long and free from adhesions, and showed no sign of inflammation. There was no Lane's ileal band. The cæcum and ascending colon were extremely mobile and dilated, and mounted on a long mesocolon, continuous with the mesentery of the ileum. The hepatic flexure was attached to the parietal peritoneum in front of the right kidney, which was not abnormally mobile. On drawing the mobile cæcum up through the wound it was seen that a thin sheet of transparent filmy peritoneum stretched from the parietal peritoneum of the right loin on the outer side of the kidney, across the lateral paracolic groove to the anterior longitudinal muscular band of the ascending colon and cæcum in its whole length, though it stopped short of the base of the appendix. (Fig. 1.) Coursing downwards and inwards from the parietal to the intestinal attachment of the membrane ran innumerable fine, straight, parallel blood-vessels, which showed up more decidedly as they became congested from exposure to the air. On close inspection this vascular peritoneal veil was seen to consist of two layers, partially fused in places. It was most firmly attached to the parietal peritoneum above, and here, across the front of the hepatic flexure, was found to be continuous with the right extremity of the great omentum. In the absence of the normal fixation of the cæcum and ascending colon, the membrane was the only agency to hold them back in their normal position in the loin, though it was so loose and elastic that it performed the function inefficiently. It was therefore not divided. The normal appendix was removed as a prophylactic measure.

On discharge from hospital the girl was given a course of treatment by cascara and abdominal massage, which resulted in regular action of the bowels and relief from her pain.

CASE 2.—The patient, a girl aged 19, was admitted on July 24th, 1913, with acute appendicitis of 56 hours' duration. Temperature 101° F., pulse 120. As to her previous health, she began to suffer from constipation and chronic pain in the right iliac fossa about the age of 14. She would have her bowels opened about every two or three days and needed aperients to secure that. No previous acute attacks.

Operation.—Ether anæsthesia; incision through right rectus. The appendix was lying to the outer side of the cæcum, which was not completely rotated. It was greatly swollen and showed several patches of gangrene. A small abscess round it was swabbed dry and the appendix removed. There was an ascending mesocolon continuous with the lower end of the mesentery; no Lane's ileal band. The hepatic flexure was the only fixed part of the ascending colon, and it was adherent to the front of the kidney, which was not movable. A typical Jackson's membrane, precisely similar to that described in Case 1, stretched across from the right parietes to the front of the ascending colon, stopping short opposite the ileo-cæcal valve. It was not feasible to ascertain whether it was continuous with the great omentum above. Drainage for 48 hours; uneventful recovery.

FIG. 1.

Jackson's pericolic membrane.

CASE 3.—The patient, a widow, aged 40, multipara, was admitted on July 22nd, 1913, with signs of chronic obstruction of small intestine. Five years ago she had partial gastrectomy and gastro-enterostomy performed by Professor G. A. Wright for cancer of the pylorus (histologically verified), which was associated with an extreme degree of general splanchnoptosis. The case was then reported by the present writer.[11] Until the last month or two she had kept fairly well, except for a dragging pain that was partly relieved by an abdominal belt. No great constipation.

Operation.—Ether anæsthesia, with local infiltration by eucaine and adrenalin; right rectus incision. There were no signs of recurrence of growth. The chronic obstruction was due to a band of inflammatory adhesion stretching from the old scar to the omentum; this was divided. Both ovaries

were cystic and each of the size of a duck's egg; they were removed. The cæcum could be lifted up 6 inches out of the abdominal wound with ease; it was not dilated. The appendix was normal; no Lane's ileal band. A well-marked Jackson's membrane, similar to those in the previous cases, stretched from the right parietes on to the anterior aspect of the ascending colon in its upper part; it was continuous with the great omentum above the hepatic flexure, which was very mobile and not attached to either liver or kidney. Though lax and long, the Jackson's membrane appeared to form the chief support of the ascending colon, and as it caused no kink it was not removed. Both kidneys were remarkably mobile. Recovery was uneventful.

CASE 4.—The patient, a female infant, aged 5 months, was admitted on April 30th, 1913, with acute intussusception of 24 hours' standing. The child was breast-fed and previously healthy.

Operation.—Ether anæsthesia; right rectus incision. An ileo-cæcal intussusception was found, with the apex in the descending colon. It was easily reduced from below, and the gut was quite viable. There was no ileal band, and the ascending colon had a long, free mesocolon. The attachments of the hepatic flexure were so lax that it could readily be drawn out of the wound. A typical Jackson's membrane was present continuous with the right border of the great omentum across the ascending colon; it was adherent to the right parietal peritoneum, though not extensively, and also to the anterior tænia of the ascending colon. The membrane consisted of two layers of peritoneum, and the vessels in it showed the usual parallel arrangement and ran downwards and inwards to the colon. In order to prevent the undue mobility of the gut from allowing a fresh intussusception, and with a view to imitating the normal peritoneal fixation, the cæcum and ascending colon were sutured back into the loin by three thread sutures about an inch apart, each picking up the postero-lateral longitudinal tænia, and fixing it to the parietal peritoneum as far back as possible. Recovery was normal.

CASE 5.—The patient, a boy aged 8 years, was admitted on Sept. 8th, 1913, with signs of tuberculous peritonitis.

Operation.—Spinal anæsthesia; right rectus incision. The abdomen contained a good deal of clear, pale yellow fluid. No definite tubercles could be seen. The lower ileum, cæcum, and ascending colon were very mobile and mounted on a common mesentery. A well-marked Jackson's membrane with the usual fine, parallel blood vessels, and here and there little flakes of fat, bridged across the right lateral paracolic fossa. It was adherent to the anterior tænia coli as far down as the base of the appendix. It was causing no kink and afforded the main support to the ascending colon and cæcum. It was therefore not divided. Its continuity with the great omentum above, across the front of the hepatic flexure, was readily demonstrated. The appendix was free and looked normal, but as the lymphatic glands into which it drains were enlarged it was removed. The colon was not fixed. Recovery was normal.

CASE 6.—The patient, a multiparous woman, aged 42, was admitted on Sept. 22nd, 1913, with a history of repeated attacks of biliary colic and transient jaundice for the past 17 years. She had had to take aperients regularly all her life, and constipation had been worse the last 12 months. On examination there was tenderness over the gall-bladder and also over the right iliac fossa.

Operation.—Ether anæsthesia, with local infiltration with eucaine and adrenalin; right rectus incision. The gall-bladder was packed with small stones. The cæcum and ascending colon were very mobile and mounted on a long mesocolon continuous with the mesentery. The cæcum could be held up 6 inches above the skin of the abdomen. It was somewhat dilated and thin-walled. The appendix was normal. The right kidney was not movable. A Jackson's membrane, very similar to those described in the preceding cases, extended from the parietal peritoneum in front of the lower pole of the right kidney on to the front of the ascending colon and cæcum, to the anterior tænia of which it was attached. This membrane was continuous with the right margin of the great omentum across the front of the hepatic flexure. It was not kinking the colon in any way, and so it was not divided. After removal of the gall-stones and drainage of the gall-bladder, the ascending colon was sutured back into the loin by interrupted sutures of linen thread, after the manner recommended by Coffey[5] (Fig. 2), care being taken to pick up the right longitudinal tænia in the sutures. Recovery was uninterrupted, and five weeks after operation the patient was having daily motions of the bowels without taking aperients.

The Nature of Jackson's Membrane.

A study of these six cases leads one to certain definite conclusions as to the nature of Jackson's membrane. The remarkably constant form of the membrane met with in all the cases, and the close analogy shown to Jackson's original description, prove that we are dealing with a quite definite anatomical condition. The age of two of the patients (viz., 5 months and 8 years respectively) affords strong evidence of the congenital origin of the membrane, and its continuity with the great omentum throws light, as we shall see, on its mode of formation during intra-uterine life. Its congenital origin finds further support in the filmy transparent nature of the membrane. The theories of inflammatory origin must be considered quite discredited. It is not denied that adhesions due to colitis may be met with in this region. Such inflammatory bands, however, are formed of dense, tough, and opaque fibrous tissue, and bear no resemblance to the membrane here described. It is surely time that surgeons recognised the differences, usually so obvious, between congenital and inflammatory peritoneal adhesions.

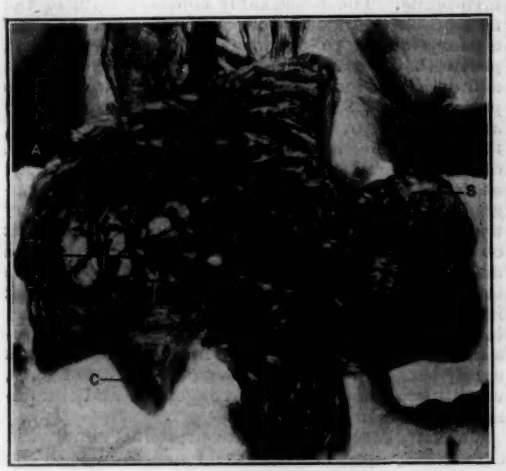
One only of the six patients presented simply the classical symptoms associated by Jackson with the condition—viz., chronic pain and tenderness in the right iliac fossa, with constipation. The remaining five cases came to seek surgical aid for conditions so various as acute perforative appendicitis, cancer of the pylorus, acute intussusception, tuberculous peritonitis, and gall-stones. How, then, can we unify the series of cases? Or must they be regarded as a chance collection, and Jackson's membrane as an accidental and unimportant anatomical variation of the peritoneum?

The one noteworthy feature that the cases present in common besides the membrane is persistence of the ascending mesocolon, with resulting abnormal mobility of the cæcum and ascending colon. Furthermore, the major lesions in all the cases (excepting the intussusception, where the mechanical importance of the intestinal mobility is sufficiently obvious) fall into a group of abdominal diseases that we are coming to regard as frequent secondary results of chronic intestinal stasis, with consequent absorption of toxins from the proximal colon. These considerations led one to suspect that an abnormal mobility of the colon, and consequently inadequate adaptation of the individual to the upright posture, had predisposed these patients from birth to intestinal stasis and its results; and it was thought probable that the combination of mobility of the proximal colon with Jackson's membrane might prove to be a persistence of a primitive developmental stage, comparable with such deformities as hare-lip and imperforate anus.

Further light on this subject and on the phylogenetic fixation of the proximal colon as an adaptation to the upright posture was sought by investigating the embryology of the region (in its later stages, after rotation of the midgut loop) and its comparative anatomy. In the course of an investigation into the peritoneal fixation of the colon in 36 human fœtuses of 5 to 9 months' growth (which will be the subject of a later communication), four examples of parieto-colic folds in the region of the hepatic flexure were observed

which were essentially analogous to Jackson's membrane. In each case the continuity of the fold with the great omentum could be shown, and each presented an unusual persistence of the ascending mesocolon. In the other 32 fœtuses it was not possible to ascertain precisely how far the great

FIG. 2.



Viscera of macacus rhesus, showing large omentum (upturned) adherent only to ascending colon, hepatic flexure, and extreme right of transverse colon. The omentum is also adherent to parietal peritoneum to right of the hepatic flexure. A, Upturned omentum. B, Omentum adherent to ascending colon and hepatic flexure. S, Splenic flexure. C, Cæcum.

omentum extended to the right in the region of the hepatic flexure, though the appearances suggested that it had done so in every case, and then became lost through fusion with visceral and parietal peritoneum.

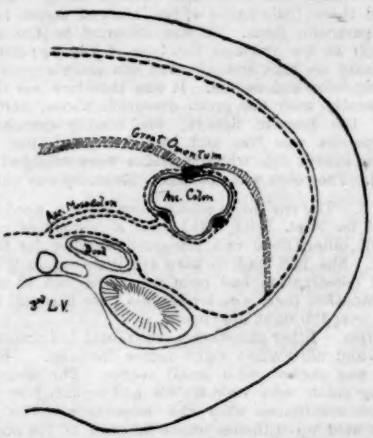
Much more definite evidence on this point was found by an examination of the cola of four monkeys and a chimpanzee (macacus rhesus (Fig. 2), macacus erythræus, cercopithecus rufo-virides, hylobates variegatus, and anthropopithecus troglodytes Kooloo-Kamba). These animals illustrated various stages in the phylogenetic transition from the pronograde mobility to the orthograde fixation of the colon. In all cases the colon was fully rotated and showed the normal human disposition in the abdominal cavity, but (except in the chimpanzee) much less peritoneal fusion than in man. In the more pronograde animals the ascending and descending mesocolon persisted. The great omentum was not fused to the transverse colon or mesocolon except at its extreme right, towards the hepatic flexure, where adhesions to the longitudinal tæniæ coli began. (Fig. 2.) It was firmly fixed to the ascending colon along the anterior and lateral tæniæ (but not to the saccules between these), and passing further to the right was attached to the posterior parietal peritoneum in the right loin near the lower end of the kidney.

The chimpanzee showed the normal human fixation of the colon, with complete loss of ascending and descending mesocolon. The great omentum extended to the right across the front of the hepatic flexure, to which it was fused, and beyond this point was fixed to the parietal peritoneum on the outer side of the right kidney. In the right lateral paracolic groove an adherent prolongation of omentum containing fat was continued down for two inches along the outer side of the ascending colon.

These observations led to the conclusion that the great omentum has originally in the human fœtus a wider extent to the right and a more important rôle in the fixation of the colon than is usually attributed to it. Fixation of the colon, after rotation of the midgut loop, would appear to begin at the hepatic flexure through the agency of the great omentum. By the same omental sheet adhering to the parietal peritoneum the ascending colon and cæcum are held back into the loin during the descent of the cæcum. The fusion of ascending mesocolon with parietal peritoneum is a secondary and later process. Normally the right prolongation of the omentum (like the ascending and descending mesocolon) fuses so completely with the subjacent peritoneum, both visceral and parietal, that its identity is almost completely lost. When, however, the ascending mesocolon persists, and fixation of the colon is incomplete, the descent of the cæcum draws out this portion of the omentum into a definite Jackson's membrane (Fig. 3).

Confirmation of this view may be found by a close examination of the peritoneum in the region of the hepatic flexure in the living body at almost any operation giving good exposure through a right rectus incision. I have observed that in most patients with normal fixation of the ascending colon the great omentum extends to the right flank above or in front of the hepatic flexure, and that a continuation of it can be traced down some way into the lateral paracolic fossa. This lateral process of the omentum is usually fused on its inner aspect with the outer longitudinal band of the colon, but between the lateral and anterior

FIG. 3.



Diagrammatic transverse section of abdomen, crossing ascending colon just below hepatic flexure, showing first stage of fixation of ascending colon. Persistence of this stage gives rise to Jackson's membrane.

tæniæ a layer of peritoneum may often be demonstrated which is more or less free from and movable over the proper visceral peritoneum. This movable film of peritoneum on the front of the ascending colon is also derived from the lateral omental process. It is no doubt to this lateral process of the omentum that Blake[7] refers when he

states that Jackson's membrane is a normal structure. It is preferable, however, to restrict the term Jackson's membrane to a definite and extensive peritoneal veil having the disposition originally described by Jackson and illustrated in Fig. 1.

It is plain, therefore, that in the type of case dealt with in this paper, owing to a failure of fusion of the ascending mesocolon, the task of fixing the proximal colon, so as to adapt it to the erect posture, falls solely on the omentum (or Jackson's membrane), and that the task is inefficiently performed. In some such cases the membrane may undoubtedly cause trouble in later life by kinking the gut and causing mechanical obstruction to its contents. It is a point of considerable interest, however, that in none of these six cases did the membrane appear to have caused any mechanical obstacle to the action of the colon. Inefficient fixation was the one serious abnormality that was constantly present.

Treatment.

The first conclusion forced upon us is that Jackson's membrane *per se* does not call for any direct operative measure, such as division, unless on exploration evidence is found that it is causing mechanical obstruction to the colon. The primary mischief to which treatment must be directed is the excessive mobility of the colon. Before describing the appropriate operative treatment for this condition it is necessary briefly to review our knowledge of the physiology of the cæcum and ascending colon.

The contents of the ileum are discharged into the colon in a fluid state, and bacterial activity is greater in the ileo-cæcal region than in any other part of the alimentary tract (Cushing). Absorption of foodstuff has been almost completed in the small intestine, and it is but an inconsiderable residue of food that is absorbed by the colon. The great function of the proximal colon is the absorption of water. This is almost all accomplished in the cæcum and ascending colon, for it has been shown by Roith[12] that the contents of the transverse colon in man are usually as firm as those of the rectum. In the proximal colon, then, the fæces are changed from a fluid to a soft but consistent mass.

Regarding the mechanism by which the contents are passed on in the human colon much controversy has arisen, nor can the question be regarded as definitely settled yet. Difficulty arises from the fact that radiographic examination of the human colon after a bismuth meal usually shows no perceptible movement of the fæces at all, even when the examination is very prolonged. In such quadrupeds as the cat, Cannon[13] has shown that the chief movement is one of antiperistalsis. The contents are rhythmically forced back into the cæcum for thorough absorption of the fluid element, and then are squeezed on through the rings of retrograde contraction into the distal colon (the ileo-cæcal sphincter preventing regurgitation into the ileum), much as in the normal peristalsis of the stomach with the pylorus closed.

In man antiperistalsis of the colon has never been observed, and its occurrence is denied by many authorities. There is, however, strong evidence that it occurs to some extent, since recognisable constituents of small enemata placed in the rectum have often been observed to escape from cæcal fistulæ. We may perhaps conclude that, in the evolution of the upright attitude, antiperistalsis, though not entirely lost, has been almost discarded, because ineffective to secure proper emptying of the proximal colon against gravity.

The usual explanation given by radiologists to account for their failure to see any movements in the colon is that peristalsis in this part of the gut takes place so very slowly that it is imperceptible on the fluorescent screen. If this view be correct, it is remarkably at variance with the clinical experience that in diarrhœa colicky pain is often felt over the proximal colon but a few seconds before it transfers itself to the left side of the abdomen and heralds the immediate evacuation of a motion.

The probable explanation of this physiological puzzle of the human colon is to be found in some observations of Holzknecht,[13] confirmed by Barclay.[14] Each of these observers saw two cases in which quite suddenly the usual saccular segmentation of the colon disappeared, and a moment later, by a rapid, pushing, peristaltic movement lasting about three seconds (without any subjective sensation), the whole of the contents of one part of the colon were thrust on into the next segment.[15] It appears probable that under normal conditions, by three or four such sudden movements in the 24 hours, stimulated perhaps by the entrance of food into the stomach, the contents are passed on from the cæcum into the pelvic colon, there to await defæcation. The preliminary disappearance of the saccules is of great interest. It would seem to show that their function is merely to increase the area of contact with the mucous membrane, and that an abnormal dilatation of the saccules owing to loss of muscular tonus may be a potent cause of stasis in the proximal colon. It may here be recalled that in most of my cases of mobile proximal colon the saccules were unusually wide and deep.

This conception of a series of sudden but infrequent contractions of the colon, in which both circular and longitudinal muscle fibres take part, throws light on the disadvantage under which a mobile proximal colon labours in an orthograde animal like man. The human proximal colon has to push on its contents against gravity, and this opposing force of gravity becomes more effective with any loss of tonus of the abdominal walls. The normal peritoneal fixation of the ascending colon not only provides its muscular fibres with a *point d'appui* that is specially firm at the hepatic flexure, but also binds the colon down on the psoas shelf, so that it passes upwards and backwards in the loin at an angle of 51° with the horizontal, as shown by Coffey.[5] When the ascending mesocolon fails to fuse with the parietal peritoneum, the muscle fibres of the ascending colon lack their proper purchase, and the colon is more vertically placed and is subject to changes in position and ptosis, with a tendency to kinking at the hepatic flexure. The mechanical disadvantage under which it acts leads to dilatation and muscular incompetence, affecting the cæcum in a particularly high degree.

The operation, therefore, that commends itself to me, and which I have performed in my later cases, consists in restoring the normal position of the proximal colon by a series of thread sutures passing through the outer aspect of the ascending colon transversely to the long axis of the gut, and then through the parietal peritoneum, as far back in the loin as possible, to the outer side of the

kidney. The operation is practically that devised by Coffey.[5] (Fig. 4.) The sutures are placed at intervals of about an inch and pick up the sero-muscular layer only. The postero-lateral tænia coli is included in each suture, which is run in and out on the colon so as to secure some plication of its wall and relief of the abnormal dilatation. By a series of four to six such sutures (the highest being near the

FIG. 4.

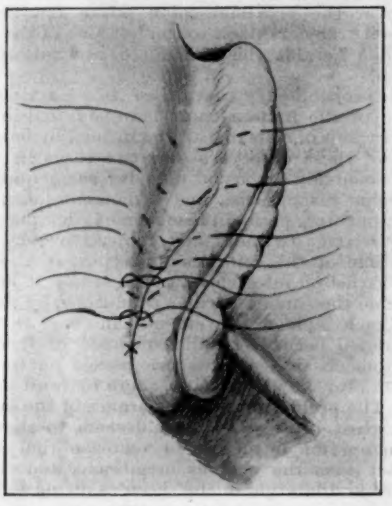


Diagram showing method of passing sutures in colopexy (after Coffey, modified).

hepatic flexure and the lowest opposite the ileo-cæcal valve), the proximal colon can be secured in a manner that closely imitates the normal peritoneal fixation. The filmy Jackson's membrane offers no obstacle to the passing of the sutures, and unless causing kinking of the colon may be ignored.

This research represents part of the work undertaken under the terms of the Ashby Memorial Scholarship. I am greatly indebted to my friends, Mr. J. Millard and Dr. T. Graham Brown, for Fig. 1 and Fig. 2 respectively. I would also express my thanks to Professor G. Elliot Smith, F.R.S., for his kindness in allowing me to dissect the fœtuses in the Manchester University Anatomy Department, and to Dr. Graham Brown and to Messrs. Jennison, of Belle Vue Zoological Gardens, for so generously placing the dead monkeys at the disposal of the Anatomy Department.

Summary.—1. Jackson's pericolic membrane is of congenital origin and is non-inflammatory. 2. It occurs in association with abnormal mobility of the proximal colon, due to a failure of fusion of the ascending mesocolon with the posterior parietal peritoneum. 3. The great omentum, from which Jackson's membrane is derived, is the most primitive agent in fixing the proximal colon to the parietes in the right loin. In cases of mobile proximal colon Jackson's membrane may be the principal means of fixing the colon. 4. Unless it causes kinking of the colon a pericolic membrane is therefore rather useful than harmful, and should not be divided. 5. The symptoms and pathological conditions found in association with Jackson's membrane (apart from mechanical obstruction due to the membrane) are primarily due to stasis in the abnormally mobile proximal colon, which is ill-adapted to the upright posture. 6. Surgical treatment should be directed to securing the normal position and fixation of the proximal colon by the operation of colopexy.

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Manchester.

A METHOD OF REMOVAL OF CARCINOMA OF THE PROSTATE

(ABDOMINO-PERINEAL COMPLETE PROSTATECTOMY).

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THE following method of removal of the prostate, its capsule, and adnexa for carcinoma differs in several ways from the operations usually performed, and its immediate success makes me venture to hope that other surgeons may deem it worthy of a trial.

The patient, aged 48, married, with four children, was sent to the London Hospital by Mr. A. F. Blake, of Grays. He complained of difficulty of micturition for 12 months, the difficulty being in starting the act. Straining did not overcome the difficulty, and there was very small projection of the stream. There had been some frequency of micturition, both diurnal and nocturnal, but no pain. Two months before admission a catheter had passed easily. For one week before admission the difficulty had been much worse, and there had been retention of urine with overflow, as well as pain in the hypogastrium referred along the penis. The patient, who is a teetotaler, denied having had gonorrhœa or syphilis.

On examination the bladder was found to be distended, and a No. 7 coudé catheter was passed with difficulty, 16 oz. of urine being removed. The urine contained a little pus in which some rod-shaped bacilli were found, but was otherwise normal. Examination by the rectum showed the prostate to be enlarged, very hard, and somewhat nodular. The mucous membrane of the rectum was freely movable over the gland, and there was no evidence of involvement of the sacral glands. A diagnosis of carcinoma of the prostate was made, and the question of operation was put before the patient. During the ten days he was in hospital before the operation all the urine had to be withdrawn by catheter.

Operation.—The bladder was distended with 15 oz. of sterilised water, and suprapubic cystotomy was performed. The condition of the prostate was carefully examined from within the bladder and bimanually with one finger in the rectum and the other in the bladder, so that the exact extent of the disease was ascertained. The suprapubic wound was then closed with a sponge, and the patient was placed in the lithotomy position. A horseshoe-shaped incision was made across the middle of the perineum and the muscular coat of the rectum exposed,

and keeping along this the rectum was separated from the structures lying in front of it until the upper limits of the vesiculæ seminales were reached. At the same time the fibres of the levator ani were divided on each side so as to free the prostate and the base of the bladder laterally.

A sponge was placed in the perineal wound and the patient was put in the Trendelenburg position. The suprapubic wound was enlarged downwards so as to admit the whole hand, and working *outside* the bladder the peritoneum was stripped back and the loose connective tissue in the cave of Retzius removed. Under electric light illumination the posterior layer of the triangular ligament was dissected from the pubes and the urethra divided distally to the fascia. The separation of the lateral aspects of the bladder and prostate was then completed, and the prostate still in its fibrous capsule with the base of the bladder and the vesiculæ were turned up and brought out of the suprapubic wound (Fig. 1) and the position of the ureters ascertained. The base of the bladder was then amputated just below the line of the entrance of the ureters, the bleeding points (which were surprisingly few) ligatured, and the bladder dropped back into position. A rubber catheter with two lateral holes was passed along the urethra into the bladder and out through the suprapubic opening and secured in the

FIG. 1.

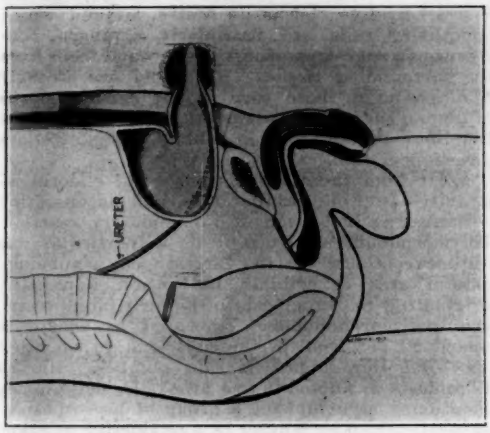

Diagram showing the prostate and bladder brought out of the suprapubic wound.

skin wound. Both wounds were then closed with drainage. (Fig. 2.) The patient was put to bed in the Fowler position.

After-treatment.—There was practically no shock, and only on one occasion did the temperature rise above 99°F. The catheter was connected with a rubber tube passing into a receptacle at the side of the bed, and at first the urine leaked out of both the perineal and suprapubic wounds. The suprapubic drainage tube was removed on the fifth day and the perineal tube on the eighth, and after this the bladder was washed out daily through the catheter. The catheter was removed on the eighteenth day, and a fresh one passed into the bladder, the daily washings continuing. The catheter was finally removed on the twenty-eighth day, both wounds were healed, and the patient was allowed out of bed. On the thirty-second day a No. 12 bougie was passed easily, but the patient had a rigor, this being the only interruption of the convalescence. The patient left the hospital on the thirty-sixth day after the operation.

FIG. 2.

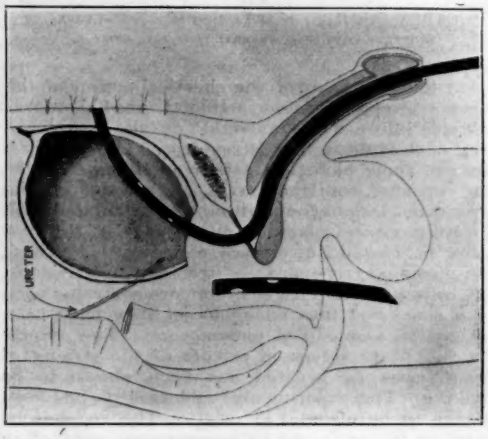

Diagram showing condition at the end of operation.

As to the condition on discharge, both wounds soundly healed. The patient could hold his urine for six hours without pain or discomfort, but micturition was then rather precipitate. A full-sized bougie easily passed into the bladder. The urine contained no pus, but there was a faint trace of albumin. The patient has been seen subsequently, and the slight tendency to incontinence has disappeared. A full-sized bougie passes readily.

The prostate was examined by Dr. H. M. Turnbull, of the London Hospital Pathological Institute, who reports "tubular and solid cubical and polygonal-celled carcinoma of the prostate."

As the operation was performed on Sept. 12th it is useless to speak of the likelihood of recurrence, but it can be claimed that the limit of operation was reached, all the tissue between the symphysis in front, the muscular coat of the rectum behind, the constrictor urethræ below, and the entrance of the ureters above being removed. The field of operation was under view the whole time, and the hæmorrhage was easily controlled in the usual way by forcipressure and ligature.

Devonshire-street, W.

MEDICAL SICKNESS AND ACCIDENT SOCIETY.—The usual monthly meeting of the executive committee of this society took place on Nov. 21st at 429, Strand, W.C., Dr. F. J. Allan in the chair. The claim account presented showed a decided reduction in the amount, and was not above the expectation. New business was well above the number for the corresponding month in preceding years, and is still rising. The committee at this meeting discussed some changes of the rules which are to be submitted to the members at the annual meeting next year. It has been thought advisable to bring these more up to date and give greater facilities for dealing with sundry matters which from time to time have arisen in the past. The basis of the quinquennial valuation was approved, and it was resolved that this should be done by the actuary to the society as before. Substantial bonuses have been paid to members insured for sickness benefit on their attaining the age of 65. Further information will be supplied by the secretary, Mr. Bertram Sutton, 33, Chancery-lane, W.C.

THE MYOCARDIAL LESIONS OF RABBITS INOCULATED WITH STREPTOCOCCUS VIRIDANS.

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AND
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ALTHOUGH a study of the chemical action of the various streptococci on artificial media affords valuable information, it should not take precedence over a classification of streptococci afforded by a study of their biological action on living animals. The present contribution is an account of the myocardial lesions found in rabbits inoculated with the streptococci isolated by one of us (E. C. R.) from cases of chronic ulcerative endocarditis.[1] These organisms corresponded to streptococcus viridans, but owing to the fact that numerous strains have been converted into pneumococci they have been designated as modified pneumococci. The affinity for the heart valves of rabbits of the strains of these cases as isolated has been shown to be striking. The experimental endocarditis has been proven to be embolic in origin. The vegetations here, as in man, tend to become very large, often obstructing the valve orifice. One of us (E. C. R.) has recently found that while the affinity for the endocardium of the streptococcus from rheumatism is as marked as that of streptococcus viridans, the mode of origin also being embolic, the type of lesions produced is very different; the vegetations remain subendothelial and tend to heal, producing small nodular scars similar to the chronic nodular endocarditis described by pathologists as characteristic of rheumatic endocarditis in man. Full details of these researches are being published in the current number of the *Journal of Infectious Diseases*.

Small blocks from the right and left ventricles and auricles from 19 hearts of rabbits in whom inoculation with these endocarditic strains of streptococcus viridans had caused endocarditis were cut and studied. Fourteen of these showed some microscopic evidence of invasion of the myocardium of the following character:—

1. In those hearts where the animal succumbed soon after the injection of a large dose of the organism masses of Gram-positive cocci were actually demonstrated within the smaller blood-vessels of the myocardium, and in some of these there was little or no inflammatory reaction. In other sections it was possible to discern that the cocci were undergoing destruction and phagocytosis by the endothelial cells of the small blood-vessels in which they became fixed; cocci, single, paired, and in short chains, were occasionally to be seen within the endothelial cells. This process had not reached the pitch portrayed in Leila Jackson's[3] article* describing similar phenomena in connexion with the myocardial lesions induced by inoculation of rabbits with the hæmolytic streptococci cultivated by D. J. Davis. In one or two instances the cocci were included within a thrombus, which obliterated the lumen of the vessel. In none of the sections was there any evidence of profuse invasion of the myocardium by cocci.

2. In the majority of hearts, however, cocci were not seen in the myocardium, and the only evidence of invasion of that tissue lay in the presence of reactive changes varying in degree, but not transgressing above a certain maximum. These reactive phenomena expressed themselves primarily, in many cases exclusively, in changes in the vascular endothelium. The mildest evidence of intravascular irritation consists of a swelling of the endothelial cells, which appear to change from a flat to a cuboidal state. The next stage in their reaction is proliferative; changes of this type are particularly rife in the smallest arterioles and in the capillaries, also perhaps in perivascular lymph-vessels. The endothelial proliferation expresses itself chiefly in three ways: in some places its chief effect is to occlude partially the lumen of the vessels concerned; in others the perivascular areas become infiltrated with "endothelial leucocytes"—i.e., movable cells apparently identical in structure with endothelial cells; while in others, again, new capillaries are formed as a result of the endothelial budding-out. This latter represents an extreme development of the proliferative process, and was definitely noted in one only of our hearts, in an area occupied by islets of necrotic muscle separated from each other by zones of fibroblastic and angioplastic reaction. A step beyond the proliferative process lies disintegration of the vascular endothelium, associated with thrombosis, and sometimes with break-up of the vessel wall—the result being the creation of an area having a small hyaline clot as its centre, around which endothelial cells are irregularly arranged, constituting a zone separating the abnormal focus from the surrounding tissues. Such foci are strongly reminiscent of those seen in the earliest stages of human rheumatic myocarditis. Advanced stages like these are only seen in rabbits dying 5–22 days after inoculation.

Apart from these various phases of endothelial activity—swelling, proliferation, and degeneration—there was little sign of inflammatory reaction. Polymorphonuclear leucocytosis in particular was quite exceptional; in the largest focus, a subendocardial area of cellular infiltration apparently originating in thrombosis of a fairly large vessel, the polymorphonuclears appeared to constitute nearly 50 per cent. of the cells, and in no other spot did they approach this number. Marked fibroplasia was noted in one area only, that already mentioned as exhibiting a group of necrotic spots separated from each other by a productive reaction. This, which represents a stage of repair, was noted in the heart of a rabbit dying 20 days after inoculation.

These phenomena are closely similar in several of their essential features to those witnessed in the following streptococcal infections: human rheumatic infection,[4] experimental rheumatic infection,[5] and experimental infection with hæmolytic streptococci.[6] The following fundamentals are common to all these infective processes: the myocardium is frequently invaded, the path of invasion lies through the myocardial blood-vessels, the endothelium of the blood-vessels plays a primary and predominant part in the defensive reaction, and the cocci are not found to have escaped in numbers beyond the vascular endothelial cells. Such differences as exist are differences of degree; and in respect of virulence we would tentatively suggest that so far as the observations on the myocardial lesions are concerned, the four types

* Dr. Leila Jackson has been kind enough to send some of her sections to one of us (C.C.).

of streptococcal infection range downward from experimental infection with streptococcus rheumaticus to experimental infection with streptococcus viridans, human rheumatic infection and experimental infection with Davis's hæmolytic streptococci occupying an intermediate position. Whether this gradation prove correct or not it seems justifiable to claim that the observations recorded in our brief note help to support the belief in the existence of a close relationship between the streptococci of rheumatism, the streptococci from chronic ulcerative endocarditis, and the hæmolytic streptococci described by Davis.[7]

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TUBERCULOSIS STATISTICS:

SOME DIFFICULTIES IN THE PRESENTATION OF FACTS BEARING ON THE TUBERCULOSIS PROBLEM IN A SUITABLE FORM FOR STATISTICAL PURPOSES.[1]

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THE necessity for statistical research in matters where direct experiment cannot be arranged under strict scientific conditions need not be emphasised to this audience. There are, it is true, some scientific discoveries which have been made through the insight of a master mind who could separate the essential from the accidental in the cases under his own observation and draw deductions that time and further research have verified. Such a thinker may also use the carefully recorded observations of others for his inspiration, or for the confirmation of his suspicions. But where this fails, and where the conditions of exact scientific observation and experiment are lacking, we have recourse to the statistical method—that is, to the consideration of series of cases with regard to certain facts, and to a comparison of one series with another in order to establish the relations of different sets of facts to each other. In this way it is possible to obtain conditions approaching those of scientific observation and experiment in the laboratory. We can eliminate to some extent the personal equation of the observer, the accidental relation of one fact to another, and the coincidence of other disturbing factors. The value of this method depends first on the accuracy with which the facts can be observed; secondly, on the extent to which they can be isolated from other factors, including the possibility of isolating and recording control cases; and, thirdly, on the possibility of describing and defining the set or class of people or conditions from which the facts have been collected. While it is obvious that common sense must be used as to what facts are likely to be of value, and that science will progress faster if the more important ones are investigated first, it is well to remember that some facts prove useful later that did not suggest much promise at the time. Thus it would be an advantage to those who wish to know what provision to make for treatment by artificial pneumothorax if they knew in what proportion of cases serious mischief in one lung is accompanied for an appreciable length of time by little or no infiltration of the other.

I am not qualified to deal with the whole statistical question of the estimation of figures connected with tuberculosis, but I think it may be of value to consider to what extent those of us who have been engaged in practical tuberculosis work can prepare records suitable for statistical expression and deductions, and to ask for suggestions as to how the difficulties which arise may be overcome. The material which I propose to consider chiefly is that which comes under observation in a modern tuberculosis scheme where all available preventive and curative measures are coördinated round a dispensary for diagnosis and specific treatment.

It is necessary first to review briefly the essential features of the clinical problem before us. Tuberculosis is a chronic disease of which neither the beginning nor the end has been accurately defined. The causal organism is so widespread that practically the whole population has the opportunity for contracting it. So many people who harbour the bacillus and are infective to others are in comparatively good health that compulsory isolation of all infective cases would inevitably lead to concealment and so defeat its own object, and we are obliged to contrive a less drastic and more complicated plan of eliminating the sources of infection. The onset and course of tuberculosis, depending, as in most bacterial infections, on a varying relation between the virulence of the bacteria and the specific protective mechanism of the host, are more varied than those of any other infectious disease known, and appear to depend more on variations in the protective mechanism than on those in the infecting organism, though it is held that the latter is also important and that there is a definite difference between the human and bovine types. The protective mechanism depends not only on innate qualities but also on constantly changing conditions in the body, and thus is profoundly affected by the environment, by all that affects the general nutrition of the body, including mental and emotional factors, and by the accidental presence of other bacteria. This variation in the course of the disease and the extent to which chronic forms occur has not been recognised until recently. It is possible that the chronic and less active forms are more common now than in days when the death-rate was higher. We are not yet in a position to estimate their importance or the part they play in the causation of chronic ill-health, in the mortality from other diseases, in spreading infection, as the precursors of fatal outbreaks of active tubercle, or in stimulating the production of any effective degree of immunity to tuberculosis. The investigation of these points is both urgently needed and peculiarly difficult, as I will show later.

The irregular course of the typical case of fatal phthisis must also be noted. Whether treated or untreated, alternating improvements and relapses are generally observed, and it is difficult to say in any individual case at the onset of serious symptoms whether life will last a month or several years. This variation is probably due to the effect of environment (in the broad sense of the word) on the protective mechanism, and it introduces a great difficulty in estimating the effects of any line of treatment. Some cases, however, show a steady

[1] Being a paper read on Nov. 28th, 1913, before the Section of Epidemiology and State Medicine of the Royal Society of Medicine.

downward course from the onset, and if a means could be found of ascertaining whether a case belonged to this type before the disease became hopelessly advanced there would be evidence in favour of a method of treatment which was followed by improvement in such a case.

This brings us back to the difficulty of diagnosis, one which opposes us at every attempt to obtain valuable statistics, and which must itself, until the laboratory can solve it, be tackled by the statistical method. The position is that the only universally accepted proof of infection having taken place is the demonstration of the tubercle bacillus, either by direct examination or, indirectly, by injection of the suspected material into a guinea-pig. It is, however, generally agreed that the occurrence of a reaction after the injection of tuberculin indicates that the subject has previously been infected by tuberculosis, though it is held by many that this reaction still occurs when the lesion is healed.

There is no method known of proving that an individual has been completely cured of tuberculosis. Further observation is needed to show whether a reaction can occur in the subject of a completely healed focus, but if tuberculin has been used for treatment it cannot be used to prove the completion of cure, since it is well known that complete tolerance to tuberculin may be established without cure. Even the failure to obtain a focal reaction cannot at present be used in this way, since it may be absent or unrecognisable in cases where there are other signs to show activity. Since there is no universally accepted criterion of the activity of a focus or of the resisting power of a patient, the decision as to the type and prognosis of a case is always a matter of personal opinion. In order to obtain statistical evidence that may overcome this difficulty, careful classification must be adopted.

It has already been laid down by all observers that for statistical purposes cases must be divided into two classes: those with tubercle bacilli in the sputum and those without. A practical difficulty arises here in comparing dispensary cases with those at a sanatorium, since it is far less easy in the former to obtain a good specimen of sputum. Two series of cases can only be compared if equal time and care have been given to the sputum examination in each. Attention must also be called to the question of whether the fact that a case expectorates tubercle bacilli—i.e., is "open"—is for that reason in a more serious condition than one who does not, or whether the higher mortality among the former is solely due to the fact that the latter include cases of mistaken diagnosis. This is important, in view of the observation made by several workers that in dispensary practice the bacilli are often detected after a reaction when they had not been discovered before. Unfortunately, in many cases too little time had been expended on the previous examination to make it certain that bacilli had never been present.

The investigation of cases in what may be termed the "prebacillary" stage is of urgent importance, and must be carried out mainly by the statistical method. It must not be forgotten that all fatal cases of phthisis, all cases infective to others, pass through this stage, so that to ignore it is as obstructive to further progress as it would be to ignore the incubation period of small-pox and wait till the symptoms develop before vaccinating. Some information as to this phase is obtained from post-mortem records. These must be used carefully, since it is difficult to express their relationship to the community as a whole. Post-mortem examinations are rarely done on people whose health and illness record can be ascertained in detail, and therefore throw little light on the extent to which chronic lesions cause symptoms. Records of tuberculin tests applied to a complete and definable class are, of course, valuable, but only to a limited degree if such observations cannot be compared with records of past and subsequent history, both of those who react and of those who do not.

What is chiefly needed in order that pertinent facts may be obtained is the observation over as long a period of life as possible of cases of chronic ill-health, the careful classification of facts thus observed, and the statistical comparison and correlation of all series of facts that could bear on the question. Much experience outside dispensary work may be utilised for this, such as that of general practitioners working among a similar class of society, and records of charitable organisations, who often follow cases up for years through the hands of varying medical men and institutions.

The records of medical inspection of school children will provide a basis of figures referring to a whole definable class, with which figures concerning selected members may be compared. It must be remembered, however, that it is useless to compare a set of children examined by one standard with a set examined by another, and the standard adopted must be clearly described. Thus school children are examined by a standard which can be applied in from two to five minutes, while the apparently healthy children from a house where a case of tuberculosis has occurred are examined at a dispensary by a standard which takes a quarter to half an hour. There may be a considerable difference between the conditions considered tuberculous by those who use the tuberculin test and those who do not. It is not always possible to secure the complete examination of the whole family of an infective case, and the reasons why some members can be brought and not others are very varied, so that the selection of those to be examined is not uniform.

A consideration of the history of the length of symptoms that a patient gives may throw some light on the prebacillary stage, but unless it can be confirmed by other evidence it is of limited value as regards conclusions concerning the pathological condition. It is, however, perfectly valid for showing at what stage of the disease it might be possible to persuade the majority of cases to apply for diagnosis and treatment. The difficulty in drawing conclusions as to the effect of treatment at this stage is so great that some people appear to think it is hardly worth while to consider such cases. Since it is only at this stage that treatment can result in complete cure without destruction of lung tissue and can prevent the case from being infective to others, it is particularly important to settle the question as to what methods are the most effective. Now in judging this it is necessary to consider the whole number of these cases and not only those who are willing to follow the practitioner's advice. A method which patients can readily undergo and which can readily be provided will be more successful than a more complicated one.

The final criterion of success for practical purposes is the extent to which the incidence of active tubercle can be lowered, and in selecting methods likely to attain to this we must estimate the percentage of cases that will be unable to avail

themselves of each, as well as the percentage of those submitting to it in which it is likely to be successful. Thus, sanatorium treatment must include among its failures those early cases who refuse to leave home and work until the diagnosis is certain, and who are then too advanced for cure. Tuberculin treatment must include among its failures those who are too stupid or too careless to attend at regular intervals or who deliberately falsify their temperatures. Treatment must always be considered from two points of view—first, its effect on those who are willing and able to do what they are told, and, secondly, its applicability to the social conditions of those needing it. The two aspects cannot always be separated, but the attempt must be made by careful classification of the facts observed with this in mind, and statistical evidence as to the effect of a particular method of treatment in relation to the environment can be obtained, even in the prebacillary stage, if a long series can be observed in this way over a long enough period. The statistics thus obtained are comparable to those of the value of vaccination, and it must be remembered that while a certain proportion of a given series would remain well without treatment, if a higher proportion is found to do so when treatment is given it may be taken as proof that such treatment has been effective.

Turning to the cases in whose sputum tubercle bacilli are found, we may obtain some information as to the type through the investigation of death certificates and of notified cases. Even the figures drawn from death certificates are however, dependent to a considerable extent on the personal equation of the medical man, since they are rarely confirmed by post-mortem examinations, and the examination of the sputum is frequently omitted. With regard to tuberculosis in infancy, such figures are particularly fallacious, and the recent developments of tuberculosis work, in diagnosing as tuberculous many cases whose death would otherwise have been ascribed to bronchitis, &c., and in showing some cases of syphilis, malignant disease, and other conditions, to be non-tuberculous, have introduced a difficulty in comparing rates of different years or different localities. Still more are records drawn from notifications affected by the personal judgment of different practitioners, and even if all the cases notified could be checked by a central authority their value for many purposes would be limited by the fact that it would be impossible to examine clinically the cases from whom they are selected.

It has come to be recognised that there is a type of pulmonary tuberculosis in which, although tubercle bacilli may be found in the sputum, the patient maintains such good health that he is in a very similar condition to the typhoid or diphtheria carrier. We have at present no means of estimating the nature of the immunity that might account for this. It is clear that if such a case should suffer from a complication the diagnosis of which was masked by the presence of tubercle bacilli, an error would be introduced into the classification. To avoid this it would be necessary to keep patients under prolonged observation before classification, without using any treatment. This is not always possible in dispensary practice, where there is too much risk to the patient if time is lost.

As an example of the necessity for both analysing observations and considering a sufficient number before drawing conclusions, I may quote my own records, which show that even out of so long a series of cases examined as 1400 it happens that nearly all whose names begin with J were unsatisfactory to treat. This might have been thought suspicious had it referred to an occupation or a locality, instead of to a letter, but the suspicion would have been removed by a closer analysis, as this shows a sufficient variety in the reasons for difficulty in treatment to suggest coincidence rather than causal relation.

I have already referred to the importance of environment in its effect on the incidence and course of the disease. Since we have no method of treatment that even claims to be both certain and rapid in action, those in general use acting through gradual stimulation of the specific protective mechanism of the patient, it is clear that environment must also have an important influence on the success of treatment. Hitherto it has only been considered in its broadest aspects, and it has not been followed up in the minute way that it deserves. The difficulty lies in the interaction of cause and effect, and is increased by a tendency to regard one effect and ignore another. This may lead to the most erroneous conclusions. For instance, a larger proportion of cases from poor homes improve under treatment than is found among cases who are well off, but it is not justifiable to conclude from this that poverty has a stimulating effect on the resisting power. Such a fallacy is checked at once by remembering that the death-rate from phthisis is far higher among poor people than among rich. The environment must be considered in relation to almost every factor that is required for statistical purposes. Under this heading may be included a large number of the difficulties that beset the accurate record of facts at a dispensary. It affects the type of applicant that is attracted. Thus, if there is indiscriminate provision of food and clothing the poorest are attracted and the self-respecting are kept away. Under a lax administration the proportion of "ne'er-do-weels" who wander from one hospital to another increases. Hard-working married men and women will only apply for diagnosis at an early stage if hours are appointed to suit them, and they are less likely to do so if the only treatment offered them involves giving up work.

Many cases of slight ill-health present themselves at tuberculin dispensaries for the treatment which has relieved their friends of similar symptoms, though they would not have dreamed of applying at a centre for diagnosis only. Varied circumstances affect the patients throughout their attendance at a dispensary, and may affect the results of treatment employed. Some may appear to live under suitable conditions for ambulant treatment at first, but later are prevented from following the precise course laid out. One has a sick child, another loses his job, another becomes pregnant, another catches influenza, yet another has a letter for a sanatorium offered him, and though he appears to have recovered satisfactorily without, he must not be dissuaded from receiving the added security against relapse that a month or two in a sanatorium might give. To disentangle and analyse these conflicting elements is a serious problem in the routine of a busy dispensary. It is often difficult to tell exactly what the decisive factor has been. For instance, a patient has been treated with tuberculin for a time and then gets a severe reaction which interferes

with work next day, making him think he is worse and refuse to attend again. A week or two later the nurse visits and is told that he does not need to go on with treatment because he is quite well. How is he to be classified?

There are many points in connexion with the course of tuberculin treatment in different types of cases that are very difficult to investigate at a dispensary. More knowledge is needed first of the course of similar methods in patients whose environment is under better observation and control, but since an important feature of tuberculin treatment is the fact that it can be given in certain cases without interfering with home life and work, it is necessary to study the complicated relationships of sensitiveness, type of disease, and environment under these conditions. As in the other difficulties to which I have referred, careful observation, analysis, and classification, with scientific methods of correlating the series of facts thus recorded, may be expected to lead us to a better comprehension of the problem.

NOTES ON THREE CASES OF GLANDERS.

BY H. M. M. WOODWARD, M.R.C.S. ENG., L.R.C.P. LOND.;
AND
K. B. CLARKE, M.R.C.S. ENG., L.R.C.P. LOND.

GLANDERS in man is always looked upon as a disease of extreme rarity, an average of four cases a year being given by some writers as the usual number in this country. The diagnosis is often a matter of great difficulty, and even with frequent bacteriological examinations the bacillus may not be found until a short time before death or even not until the autopsy. When we think, however, of the very large number of fatal cases of septicæmia and pyæmia occurring during the course of the year without any bacteriological examination being made, or, at any rate, without the bacteriology of the case being followed up before and after death, it is surely reasonable to conclude that glanders may be much more common than is supposed.

The following three cases, treated at St. John's Hospital, Lewisham, serve to illustrate this point. They were all three admitted for severe pyrexia. The first is of great interest, as a definite diagnosis was made from a bacteriological examination of the urine a few days after admission. And the case shows the great importance of examining the urine for bacteria in all cases of obscure pyrexia where nothing can be found on physical examination, where there is no demonstrable focus, and where no organism can be found in the blood.

CASE 1.—The patient, aged 19, a sailor, who had been ill for three days, was admitted for pyrexia and complaining of a deep-seated pain in the right epigastric region. There was nothing of importance in his previous history, and as far as can be ascertained he had nothing to do with horses. The physical examination of his chest showed some slight dulness over the right apex. The leucocyte count was normal. A syringeful of blood was taken from a vein and planted out on various media which remained sterile. During the first few days the drowsy condition of the patient continued to increase. On the fourth day after admission, as he had complained of some pain after micturition, a catheter specimen was taken and planted out on all the ordinary media. In 24 hours there grew colonies of staphylococci and of a Gram-negative bacillus which proved on further investigation to be the bacillus mallei. The condition of the patient became worse, his temperature was of a septic type, he developed intense jaundice, and there appeared over the chest, back, and face an eruption simulating small-pox. After having delirium for several nights he gradually passed into a state of coma, and died 11 days after admission.

At the autopsy scattered abscesses were found in both lungs, the base of the right lung being chiefly affected. A large retroperitoneal abscess was discovered on the anterior aspect of the sacrum. Cultures from both these situations yielded a growth of the bacillus mallei. The bile was inspissated and could not be squeezed through the cystic duct. The liver and spleen were normal, and cultures from them and the heart's blood remained sterile; the brain and its coverings were normal.

CASE 2.—The patient, a mechanic aged 43, was admitted for acute rheumatism. He gave a history of typhoid fever and diphtheria four years previously and had suffered from gout. His work did not bring him in contact with horses, and he did not live near any stables. He was taken ill a few days before admission with an acute pain in the right ankle-joint. He was pale and much wasted, having lost weight rapidly during the previous three months. He complained of severe pain in the right ankle-joint, the outer aspect of which was red, œdematous, and very painful. The examination of the heart, lungs, and urine showed nothing abnormal. His condition began gradually to get worse; the temperature kept high, with one well-marked rigor. A small abscess formed and was opened on the outer aspect of the right leg; other joints became involved, particularly the knee-joint, right shoulder, and left ankle. Inflammatory foci appeared on various parts of the body, but slowly disappeared without suppuration. A well-marked pleuritic rub was heard at both bases of the lungs, but these were the only physical signs heard throughout the illness.

No definite diagnosis up to this time had been made though several had been suggested. At various times it was thought to be a case of acute rheumatism, acute gout, and then phthisis, and now a diagnosis of gonorrhœal pyæmia was suggested. Blood was taken from a vein, but remained sterile on all the media. Pus taken from the wound on the right leg contained streptococcus pyogenes. Smears taken from the urethra showed the presence of gonococci. The pyæmia increased and the patient rapidly lost ground. An abscess formed on the right leg and was opened, a quantity of pus escaping. In this pus was found a Gram-negative bacillus, which proved on further investigation to be the bacillus mallei. Five weeks after admission a papule appeared on the left side of the neck which soon became vesicular, and in 38 hours the whole face was covered with pustules and the eyelids were very œdematous, the condition simulating small-pox. In these pustules was also found the bacillus mallei. The patient died six weeks after admission.

CASE 3.—The patient, aged 14, was admitted as being a possible case of cerebro-spinal meningitis. He was very drowsy, with a distinctly septic temperature varying between 99° and 105° F. He was quite conscious, declared to have no pain, was rather sleepy, and his head was very slightly retracted. Cultures were taken from his blood and cerebro-spinal fluid, from his nose and throat, and from some ulcers he had on his legs. The first two remained sterile. The cultures from his nose and throat grew the ordinary organisms found in these parts; from the ulcers a mixture of staphylococci and streptococci grew. After a fortnight the retraction of the head, somnolence, and slow cerebration were more marked, but he gave perfectly sensible answers. Repeated cultures from the various parts always gave the same results and never threw any light on his condition. Some of the ulcers healed, whilst fresh ones broke out. From inquiries it was discovered that the patient a fortnight before he fell ill had been looking after a horse which was suffering from ulcers, and that a dog which was kept in the same stables had died from an unknown disease. The head became more and more retracted so that it obliterated the œsophagus, and in the end also the trachea. The occiput actually touched the back between the shoulder blades. The patient died five weeks after admission.

At the autopsy all the organs were found to be normal but very emaciated, as in a subject who had died from starvation. The brain and medulla were normal, and only in the cerebellum a small patch of grey-greenish, viscous pus was found. Cultures from all the various organs were taken, and also from the pus in the cerebellum. Most of the

cultures remained sterile; some showed post-mortem bacteria. The cultures taken from the pus in the cerebellum grew the bacillus mallei.

The perusal of all three cases shows in what varied and obscure ways glanders manifests itself, simulating first one disease and then another, all of them being quite unlike the ordinary text-book description of glanders. And yet when we realise the very infectious nature of the disease—for the bacillus mallei will infect through the unbroken skin—great stress should be laid on the importance of making a definite diagnosis as early as possible. And it must also be borne in mind that glanders may remain latent in the system for a long time, sometimes for years; and sometimes, although the patient may appear to be in excellent health, with the exception, perhaps, of the occasional recurrence of small abscesses, the disease is still present as the organism has not actually been eradicated, and the patient may still be said to be suffering from glanders. In fact, we may say that the incubation period of glanders is unknown and that this disease is more difficult to eradicate from the system even than tubercle or syphilis.

Medical Societies.

ROYAL SOCIETY OF MEDICINE.

SECTION OF THE HISTORY OF MEDICINE.

Martial and Medicine.—Medical Aspects of the Greek Anthology.—Exhibition of Specimens.

A MEETING of this section was held on Dec. 3rd, Sir WILLIAM OSLER, the President, being in the chair.

Dr. John Ferguson, professor of chemistry in the University of Glasgow and a former president of the Bibliographical Society, was unanimously elected an honorary member in place of the late Dr. J. S. Billings. Dr. Leslie Cowlishaw, Dr. J. F. Halls Dally, Dr Philip Hamill, and Dr. Herbert R. Spencer were elected ordinary members.

Dr. RAYMOND CRAWFURD read a paper entitled "Martial and Medicine," in which he cited the chief allusions to medicine by Martial, the Roman satirical poet, and submitted renderings of these epigrams into English verse from his own pen. The paper has been published in THE LANCET.[1]

—Dr. R. O. MOON criticised the paper in a friendly spirit, saying that he demurred to Asclepiades being considered a charlatan, and saying that Martial was poor and wrote to make money. It was for this reason that he pandered to the vilest tastes of the decadent Roman empire and indulged in the grossest flattery of the Emperor Domitian, who was one of the worst of the immortals.

Dr. J. D. ROLLESTON read the second part of his paper on the Medical Aspects of the Greek Anthology. He dealt with the allusions to medicine and religion, puerperal mortality, deaths at different ages, modes of death, acute and chronic infections. He also pointed out possible references to malaria, tuberculosis, and syphilis. There were definite allusions to alcohol and other intoxicants, gout, digestive disorders, latrines, baths, cosmetics, deformities and dwarfs, giants, diseases of the nervous system, and veterinary medicine. In conclusion, he stated that although many of the medical epigrams were anonymous or by writers whose date was uncertain the Greek anthology deserved more attention than it had hitherto received for the following reasons: (1) It offered numerous illustrations of the relations between Greek medicine and religion, especially as regard Asklepios; (2) it contained definite references to certain diseases, such as gout, alcoholism, and malaria, as well as numerous allusions to epidemic diseases, the nature of which could not be determined; (3) it supplied valuable negative evidence of the existence of syphilis in antiquity in spite of the numerous facilities for the spread of the disease; (4) it illustrated many subjects in the private life of the ancients more or less closely concerned with medicine, such as baths, latrines, cosmetics, prostitution, the homosexual or rather bisexual life of the ancients, popular remedies and superstitions; (5) as a source of medical satire and caricature it deserved to rank with the works of the Latin poets.

Mr. C. J. S. THOMPSON showed objects of medical and surgical interest from the historical medical museum of Mr. Henry Wellcome. Amongst the exhibits was "a chastity belt," an early bullet extractor which seemed to be older than the time of Ambroise Paré, and a beautiful ivory model of the temporal bone showing the structure of the internal ear.

[1] THE LANCET, Dec. 6th, 1913, p. 1643.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

Exhibition of Cases and Specimens.

A MEETING of this section was held on Nov. 28th, Dr. LEONARD G. GUTHRIE, the President, being in the chair.

Dr. C. E. ZUNDEL showed a case of Recrudescent Rickets with Tuberculosis and Infantilism. The patient, a boy aged 14 years, had been, when 7 years old, treated as an out-patient and then as an in-patient, when he was described as very undersized and with marked rickets. At the present time his height is 3 ft. 4 in. and his weight 2 st. 13 lb. There are marked deformities of the forearms due to multiple fractures. There is some broncho-pneumonia and considerable ascites.

Dr. F. G. CROOKSHANK and Mr. L. E. C. NORBURY showed cases of Bilateral Congenital Dislocation of the Hip in Twins. The patients were females aged 8 years and 11 months. In each case there was marked displacement of the head of the femur on to the dorsum ilii on either side.

Dr. CROOKSHANK showed a case of Nervous Cretinism in a girl aged 5½ years. In August, 1912, it was recorded that the skin was harsh, the gait tottery, and the knee-jerks increased. Subsequently the ataxy increased, but as the result of a course of thyroid treatment there had been great improvement and she is growing fast

Dr. CROOKSHANK also showed a case of "Jaw-winking." The patient, a girl aged 9 years, has congenital unilateral ptosis. When the muscles of her face are at rest the ptosis is considerable. When she depresses her jaw and "rings" her mouth, not only does the ptosis disappear, but the sclerotic becomes visible on the affected side, above the cornea.

Mr. PHILIP TURNER and Dr. H. TIPPING showed a case of a Mesenteric Cyst Simulating an Intussusception. The patient, a boy aged 4 months, had a sudden attack of pain followed by the passage of blood per anum. Under an anæsthetic a lump could be readily felt. The cyst, about an inch in diameter, was situated in the angle between the ileum and the ascending colon, causing obstruction at the ileo-cæcal valve. Histological examination showed the cyst to be lined by intestinal mucous membrane. The cyst did not communicate with the intestine.

Dr. W. J. MIDELTON showed two cases of Dermatitis Herpetiformis treated by counter irritation. The first case, a child aged 7 years, in whom the disease first appeared at the age of 3 years, was well within three weeks, though there had since been several relapses of short duration. The second case was equally satisfactory.

Dr. G. A. SUTHERLAND showed a case of Anterior Poliomyelitis with Paralysis of the Abdominal Muscles and Collapse of the Lung. The child, a female, aged 15 months, was wasted and rickety. Both lower extremities showed signs of former poliomyelitis. On coughing or crying two marked bulgings were seen, one occupying the upper two-thirds of the right abdominal wall and the other the lower two-thirds of the left side. Over the lower lobe of the right lung there were posteriorly impaired resonance and faint breath sounds. It was suggested that the signs in the right lung were due to massive collapse of the lower part of the right lung due to paralysis of the muscles of the abdominal wall.

Dr. J. W. CARR showed a case of Enlargement of the Liver with Ascites in a boy aged 2½ years. Dr. Carr considered that the liver was almost certainly cirrhotic, but the cause of the cirrhosis was very obscure.

Dr. F. J. POYNTON showed a case of Osteogenesis Imperfecta with great distortion of the bones of the lower limbs. The child had been admitted to hospital on several occasions for fractures of the bones of the legs from very slight violence.

Dr. POYNTON also showed a child, aged 5 years, with a slightly Enlarged Liver and Spleen and a Cardiac Lesion of doubtful nature.

Dr. POYNTON also showed three children in the same family with Alopecia Areata.

Mr. H. A. T. FAIRBANK showed a case of Ununited Fracture of the Neck of the Femur treated by operation after eight years. The fibrous bond of union was excised, and two long screws driven from the trochanter through into the head. Bony union occurred, and the operation succeeded in abolishing the pain and stopping the progress of the deformity.

Mr. FAIRBANK also showed a case of Osteo-periostitis of the upper end of the femur of uncertain origin. The skiagrams suggested an inflammatory lesion, not a new growth. There was no history of specific disease and the Wassermann reaction was negative.

Dr. F. LANGMEAD showed two sisters with Deformity of Bones and Splenomegaly. The first child, aged 6 years and 5 months, showed skeletal changes closely resembling those of rickets. The skleen extended down to the iliac crest and filled the left side of the abdomen. The liver was also slightly enlarged. The second child, aged 5 years and 4 months, showed similar but less marked bony changes and the spleen reached about an inch below the costal margin.

Dr. CROOKSHANK showed skiagrams of a case of Dactylar Deformity from Amniotic Bands.

MEDICAL SOCIETY OF LONDON.

Intrathoracic Aneurysm Wired by Colt's Method.—A Modified Operation for Circumcision.

A MEETING of this society was held on Dec. 8th, Sir DAVID FERRIER, the President, being in the chair.

Sir ANTHONY BOWLBY and Mr. D'ARCY POWER showed a specimen of an Intrathoracic Aneurysm which had been wired four months before death by means of Colt's apparatus. The patient was a middle-aged woman who had engaged much in athletics. She married and contracted syphilis nine years previously, but she only came under medical observation in 1907, complaining of pain in her chest and vague "dyspeptic" symptoms. In August, 1910, a physical examination of her chest showed that she had a soft systolic murmur over the aortic valves, but no suspicion of aneurysm was entertained. At this time she complained of pain extending to the left shoulder and down the left arm. In January, 1911, pulsation became visible in the second intercostal space near the sternum, and she began to expectorate mucus which was occasionally blood-stained. A skiagram taken in July, 1912, showed a sacculated aneurysm springing from the descending part of the arch of the aorta. The patient was then put to bed, but the aneurysm increased in size, and in January, 1913, it was found to have eroded the second, third, and fourth ribs with the corresponding costo-chondral joints. Pain was a marked symptom throughout. She was admitted into hospital, and the aneurysm was wired with Colt's apparatus on March 25th. The sac of the aneurysm was found to be thin and to contain no great quantity of clot as it pulsated equally in every part. 105 inches of dull gilt wire were introduced into the sac, and the operation lasted a quarter of an hour from beginning to end. The patient made a speedy recovery, and left the hospital on April 19th free from pain and well enough to take a small flat of two floors with a garden. Her bedroom was on the upper floor, and she decided that she would no longer remain in bed, but would go up and downstairs and lie out in the garden. This she did until June 19th, the pulsation in the aneurysm remaining imperceptible. On June 19th the skin of the breast beneath the scar was noticed to be faintly discoloured, and she was kept in bed. From June 30th onwards the aneurysm rapidly increased in size, there was again great pain, and on July 16th she died suddenly. A post-mortem examination made 18 hours after death showed that the aorta had ruptured posteriorly into the mediastinum which contained about a pound of blood. Subsequent examination showed that the wall of the aortic arch was highly atheromatous without any calcareous plates. The aneurysm was saccular, springing from the left side of the descending part of the arch of the aorta and measuring in its hardened condition 5 inches in width at the point where it opened into the aorta. It was filled with laminated clot for a depth of 2¾ inches. The clot was traversed in its whole length by the wisp of wire which had expanded fully, and the amount and distribution of the clot showed how much effective coagulation of the blood had taken place since the introduction of the wire and apparently in consequence of its presence. The authors pointed out the interest of the case. 1. The aneurysm had occurred in a lady, which was itself unusual; but here the two necessary factors were present—syphilis and undue strain owing to her athletic prowess. 2. The slow formation of the aneurysm without recognition. 3. The improvement following upon the introduction of the wire, as shown by the consolidation of the aneurysm and the diminution of pain. 4. The fatal termination due to the extension of the aortic disease and not to rupture of the aneurysm. The paper concluded with an allusion to similar cases treated by the introduction of wire, the details having been collected by Professor Eshner, Professor Hare, Dr. William C. Lusk, and Dr. John Finney.—Mr. POWER showed Colt's apparatus and demonstrated its use.

Mr. T. H. KELLOCK read a paper on the Advantages of a Modified Operation for Circumcision. He said that in his opinion complete removal of the prepuce and permanent exposure of the glans was open to objections. The prepuce was the natural covering of the glans penis, protecting it from irritation or injury and preserving its sensory faculties. Sepsis, hæmorrhage, &c., had been answerable for a large number of what might be called unnecessary deaths, whilst hæmophilia had frequently been detected. Such considerations weighed against the performance of the operator, unless it was really necessary. Dysuria was probably the most frequent condition for which circumcision was employed, but he thought quite unnecessarily, for the prepuce was normally adherent to the glans penis; and if the closeness of the adhesion to the orifice of the urethra partially blocked it, the prepuce could easily be separated just around it, and the dysuria if caused in this way relieved. A more important cause of dysuria was a small pin-hole orifice in the urethra. He found quite a number of boys sent into hospital for inguinal hernia who had this condition. They had almost always been circumcised, but the pin-hole meatus had been left untouched. The remedying of this simple matter should always be attended to whether circumcision was performed or not. When the prepuce was much adherent, the preputial orifice small, and the prepuce not unduly long, a small incision on the dorsum and one suture was all that was required to allow of quite easy retraction. Again, for inflammation or suppuration under the prepuce the same procedure sufficed, if the prepuce was not abnormally long. The incision should only be about a quarter of an inch in length, and include both skin and mucous membrane. If these foregoing conditions were complicated by an unduly long prepuce, or if the latter persisted alone circumcision was indicated, but he advocated a considerably modified operation. It consisted in the removal of only that portion of the prepuce that was redundant. After separating any adhesions there might be around the urethral opening, the prepuce that projected beyond the tip of the glans was cut off in a slightly slanting direction parallel with the line of the corona; both skin and mucous membrane were divided at the same level, and no more of the latter than of the former was removed. Then a small incision, including both skin and mucous membrane, about an eighth of an inch long was made on the dorsum, which converted the round opening into a slightly pear-shaped one. The hæmorrhage was generally insignificant and seldom called for the use of artery forceps. In quite young babies this was all that was needed; in older children he generally united the skin and mucous membranes with four horsehair sutures, tying them very tightly, so that they dropped out by themselves after four or five days. If the child was anæsthetised, a little tincture of iodine might be painted over the wound, but no application or dressing was required. The dressing of a circumcision was as unnecessary as it was painful; the result was better without it. A small apron of guttapercha tissue would prevent the diaper from sticking to the wound. The prepuce left in this way should be sufficient just to

cover over the glans penis and leave the urethral orifice visible. It could be retracted once a day by the nurse for a week or so and a drop or two of oil or a little soft vaseline placed on the glans would prevent it from becoming sufficiently adherent to the prepuce to make retraction painful.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Isolation and Quarantine Periods.

A MEETING of this society was held on Dec. 3rd, Professor WILLIAM RUSSELL, Vice-President, being in the chair.

Dr. CLAUDE B. KER, medical superintendent Colinton Mains fever hospital, opened a discussion on Isolation and Quarantine Periods in the More Common Infectious Diseases. He said that regulations for isolation and quarantine of infectious diseases were to some extent traditional. Yet since our views on the infectivity of certain diseases were undergoing modification, we should be permitted to criticise the opinions of our predecessors. He disclaimed any desire to find fault with the regulations laid down by public health departments and by schools. He did not expect either a public health authority or a school to take the initiative in relaxing generally accepted rules which appeared to many unnecessarily strict or irksome. Were he, as a public official, to translate into practice at once all the opinions which he had formed after long experience, not only would he cause considerable alarm and disquiet amongst the general public, but he could not even count on the support of the profession. An infectious case was confined for two reasons, infectivity and disability. In some conditions the former lasted very much longer than the latter, whereas in others the disability might be prolonged far beyond the usual period of infectivity. Even here, however, as far as the home was concerned, a relaxation of the rules for excluding visitors and maintaining rigid isolation might conceivably be to the patient's advantage, as it would undoubtedly be to the household, and in boarding schools particularly much trouble might be saved. The normal minimum isolation recommended for scarlet fever was six weeks—a period which, in Dr. Ker's own opinion, might be either much too short or unnecessarily long, according to the condition of the individual case. The six weeks' tradition was common also to Germany, France, and America. The origin of this arbitrary regulation was that desquamation might be expected to be complete in that time. But was desquamation infectious? If not, and much evidence had been collected in the last 20 years which favoured such a view, the revision of our traditional ideas and regulations was overdue. If it was, then satisfactory evidence thereof should be produced. Scarlet fever was infectious before desquamation began, and might persist long after desquamation had ceased. Why should not a source of infectivity which preceded and survived desquamation be responsible for infection during the desquamative period without such infection being attributed to the exfoliated skin? The patient might just as easily infect his skin as his clothes. Once he had ceased to be infectious he could no longer infect either his skin or his clothes, and when the one had been cleansed and the other disinfected Dr. Ker saw no reason to dread a convalescent, even if he were still desquamating. He quoted the experience of Priestley, who, during an epidemic of small-pox, discharged 120 desquamating children from the Leicester fever hospital without causing a single secondary case; of Millard, who reduced isolation to four weeks without increasing his percentage of return cases; and confirmatory experiences of Lauder and Moore, of Huddersfield. Cameron and Turner also threw great doubt on the infectivity of, at any rate, late desquamation, while Goodall said that "clinical evidence goes to show that after the fourth week the scales are not infectious." The idea of the infectivity of desquamation arose from the fact that scarlet fever was considered analogous to small-pox, the infective agent of which was present in the skin lesions and resulting crusts. But the rash and desquamation of scarlet fever were almost certainly due to the toxins of the unknown micro-organism, not to the germ itself. It was better to regard scarlet fever as analogous to diphtheria. Meikle found that the average duration of infection in diphtheria was three weeks, while Graham Smith found 66 per cent. of convalescents were germ-free in five weeks. The bacilli might persist in the throat for long, however, though in many such cases the germs were non-virulent. The throat in scarlet fever cases was infectious from the first and remained so in some cases for extremely long periods. He had seen infection carried after 20 weeks' detention. It did seem reasonable to assume that in many cases the patient became, as in diphtheria, free from infectivity within three weeks, and that "clean" cases with normal tonsils and no muco-purulent discharges might be released with safety long before the statutory six weeks had elapsed. It was not the patients discharged after a comparatively short detention who carried infection home, but those who by reason of some nose or ear complication were detained longer than the normal. In 1911 he showed that the percentage of infecting cases increased steadily in proportion to the length of detention and was most trivial in those patients who had been detained for periods shorter than the average. Dr. Lauder at Southampton had had surprisingly good results with a minimum detention of 28 days. During three years 589 patients were treated without a single return case. Dr. Ker had for several years totally disregarded late desquamation of the feet. He approved of the rigid isolation of desquamative patients when they were found in a tenement or classroom in which the disease had broken out, and he suggested that an alteration of the accepted minimum period of isolation from six to five weeks would be a great step in advance. As regarded the period of quarantine to be imposed on contacts he would be perfectly satisfied with that suggested by Goodall—six days. Diphtheria patients must be isolated until the necessary negative cultures had been obtained. Very often the illness lasted much longer than the infectivity. As regarded the quarantine period he saw no use in continuing to quarantine perfectly well contacts who had given two successive negative cultures, which might well be obtained within three or four days. As regarded children, at any rate, cultures should be taken from every contact and the proved carriers isolated. For measles the usual isolation period in the Edinburgh City Hospital was a fortnight from admission—i.e., from the period of eruption. His predecessor always allowed adult patients to return home in ten days, and in pressing cases he had often followed his example. Return cases of measles were unknown, and any feeling of restraint lay only in the fear of ear or lung complications. In hospital outbreaks he regarded measles patients as free from infection as soon as the rash had disappeared. He regarded as possibly infectious after the rash cases of conjunctivitis, bronchitis, and bronchopneumonia. The quarantine period of measles he employed in hospital outbreaks was 15 days. The exact incubation period of measles was difficult to determine, but eight days might be regarded as a minimum, and nine or ten were more frequent from the moment of infection to the occurrence of the first symptom and from 13 to 15 days to the appearance of the rash. How far we might be justified in using a part of this incubation period to save school time was a matter for discussion. In rubella his own hospital detention was ten days, though he often was satisfied with less. Most of the mischief was done in the prodromal stage, which was often almost without symptoms. He thought that contacts could safely attend school for eight to nine days after exposure, and thereafter should be excluded until the twenty-first day was passed. In whooping-cough he had the gravest doubts as to infectivity when the paroxysmal stage had fully developed, and he considered that in favourable circumstances and with otherwise healthy children isolation until the whooping ceased was quite unnecessary. Of the great infectivity of this disease in its prodromal catarrhal stage there was no doubt. There was probably but little infectivity after the patient commenced to whoop. The bacillus of Bordet and Gengou was difficult to find in the sputum after the first week of the paroxysmal stage, which suggested that the sputum rapidly lost its infectivity. Rigid isolation was probably unnecessary after the paroxysmal stage had lasted for a week or ten days. Chicken-pox was in some cases infective before the eruption appeared. Dr. Ker firmly believed that the crusts were infective and that a patient was so until the last original crust had separated. Three weeks appeared to be a necessary

minimum. As regarded quarantine he often allowed contacts to mix with other children up to the eleventh day, when they were isolated until the twenty-second. He had always found a quarantine of 21 complete days sufficient. In mumps the usual isolation period was three weeks, and Dr. Ker had never seen harm result from allowing patients out of isolation when a full week had elapsed after the disappearance of swelling. In mild cases this was often slightly within the fortnight. Exclusion of contacts from the thirteenth to the twenty-sixth day from the date of the first and last exposure respectively would, in Dr. Ker's view, be a quite safe rule for schools to adopt. Bacteriological methods could be relied on to determine the isolation period in enteric fever and there seemed no valid reason why contacts should be excluded from school. Small-pox stood by itself; typhus occurred too rarely to demand consideration.

Dr. G. H. MELVILLE DUNLOP was sceptical whether if all these schools regulations were in abeyance the incidence of infectious disease would be seriously affected. Measles and whooping-cough concerned the practitioner most, as they caused the greatest mortality amongst young children. He thought that as soon as whooping-cough had developed it ceased to be infectious. Chicken-pox was so mild that they might ignore isolation altogether. Scarlet fever was now so mild that it was often difficult to recognise. He had had return cases after eight to ten weeks' isolation.

Dr. J. HALLY MEIKLE cited the returns of attendance at the Edinburgh board schools during the last five years. The average number of absences was 4000 due to actual disease and contact. The school population being 40,000, that was 10 per cent.; 30 per cent. of these absences were due to notifiable diseases. Each year from one-third to one-quarter of the total absences were due to measles, one-seventh to whooping-cough, one-eighth to scarlet fever, and one-fortieth to diphtheria. He was glad that the "perfect attendance prize" had been abolished in the Edinburgh schools during the past three years.

Dr. ALEXANDER JAMES agreed with the modification of the restrictions as regarded infectious diseases. Since 1887 he had records of absentees in the Merchant Company's schools, and these were due more to susceptibility than to infection.

Mr. R. H. FERARD, headmaster of the Edinburgh Academy, said that it gave enormous trouble to administer those regulations dealing with infectious diseases. He had to carry them out with scrupulous exactitude, though he believed that many of them were practically of no value. Mischief was done in quite the early stages and before the cases were diagnosed. He thought that cases exposed to measles infection might attend till the eighth day and mumps till the fourteenth day.

Dr. G. KEPPIE PATERSON, Dr. JAMES RITCHIE, Dr. HOPE FOWLER, Dr. BURN MURDOCH, Dr. JAMES CARMICHAEL, and others took part in the discussion, and Dr. KER replied.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held on Oct. 29th, Dr. J. Lindsay, the President, being in the chair.—The President showed microscopic slides illustrating various stages of Necrobiosis in the Embryo: (1) Normal ectoderm and mesoderm; (2) fragmentation of nuclei; (3) karyolysis; and (4) total disintegration of cells. He pointed out that these changes took place in the tissues under aseptic conditions—e.g., while the embryo was in the amniotic fluid. He pointed out also that these changes were evidence of necrobiosis occurring in the embryo, and expressed the opinion that the condition was not rare.—Dr. D. T. C. Frew read a paper on a case of Œdema Vulvi treated by a salt-free diet. The patient, a primægravida, had swelling of the vulva of some weeks' duration. Her previous history was that of a healthy woman who had no serious illness at any time. She was seven and a half months pregnant and had noticed the swelling at the sixth month. The ankles were slightly swollen towards night only. The œdema of the vulva became so marked that she had to take to her bed, and she also complained much of shooting pains and intolerable itch in the parts. There were no varicose veins in the legs, but hæmorrhoids were present. The abdomen was much enlarged, the fundus uteri reaching close to the xiphisternum but no ascites could be detected; the uterus was tense, and the fœtal parts could scarcely be detected. The heart and lungs were normal; systolic blood pressure 125 mm. The urine was normal. She suffered from constipation. Treatment at first consisted of local applications of moist heat with 1 per cent. cocaine ointment for the pruritus and support with pad and bandage was given. Internally diuretin, 10 grains at four-hourly intervals, purgatives and reduction of fluid in the diet. This treatment had no effect after a week's trial, and a salt-free diet was tried: home-made bread, rice, fresh fruit, milk, and eggs without salt. A small amount of meat was allowed steeped in cold water for some hours before cooking. Diuretin was continued. At the end of 48 hours there was a visible diminution in the swelling, pain was absent, and the pruritus less severe. In ten days the œdema was almost absent and the uterus less tense. She returned to ordinary diet about this time, continuing the diuretin, and there was a slight return of the œdema. She had ultimately a normal labour—twins—and an uneventful recovery. Dr. Frew considered the œdema to be due to pressure by the distended uterus, there being no evidence of renal insufficiency.—Dr. Macfarlane remarked that sometimes diuretin suddenly began to act after it had been in use for some time.—Dr. McIlroy thought the case might have been one of renal insufficiency and the swelling of the vulva the only sign of it, and asked why a salt-free diet had its effect.—Dr. Frew replied.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Nov. 18th, Dr. Sykes being in the chair.—Dr. J. B. Dunlop introduced a discussion on Non-tuberculous Disease of Joints, confining his remarks to rheumatoid arthritis. The nomenclature surrounding rheumatoid arthritis being cleared up, he described true rheumatoid arthritis as a general disease, *primâ facie* a wasting disorder with considerable vasomotor disturbance. Various infective foci, he said, have been blamed for its causation—i.e., pyorrhœa, rhinitis, otorrhœa, and colitis, the prognosis being most gloomy. He considered the treatment under three heads: (1) General—all forms of suspected chronic infection must be vigorously treated, the diet must be good and substantial, and the intestinal tract receive careful consideration; (2) medicinal—general tonic treatment, cod-liver oil, iodides, and arsenic are indicated; and (3) hydrotherapeutic—baths, massage, radiant heat, iodine ionisation.—Dr. C. M. F. Althorp, discussing the question from a surgical aspect, alluded to metastatic joints, syphilitic, nervous, and gonorrhœal. He did not seem much impressed with the vaccine treatment. Aspiration combined with the injection of formalin in glycerin seemed, he said, to give good results, particularly in the gonorrhœal forms, while drainage increased the tendency to ankylosis and should be avoided whenever possible.—Mr. Basil Hughes advocated the vaccine treatment in suitable cases. He had had remarkable success especially in rheumatoid and gonorrhœal cases, but he laid great emphasis on the fact that the vaccine must be autogenous; stock vaccines only lead to disappointment and failure.

ÆSCULAPIAN SOCIETY.—A meeting of this society was held on Dec. 5th, Dr. David Ross, the President, being in the chair.—Many interesting pathological specimens were shown. Among others Mr. R. M. Vick showed the pelvic colon from a patient upon whom Mr. W. McAdam Eccles had operated for intestinal obstruction consequent upon chronic diverticulitis, the pathology of which and its genesis were fully described.—Dr. A. Feiling exhibited a Brain from a man, aged 78, first seen in a state of coma. Both optic thalami showed thrombosis—one recent, one old. The heart was normal; the kidneys were not much affected; the basal brain vessels were calcified.—Dr. A. F. S. Sladden showed the Heart of a fat subject aged 40 years. The woman had disease of the tricuspid, mitral, and aortic valves. The cavities were dilated, the liver was enlarged, the stomach inflamed, and the pancreas fibrotic.—Dr. A. E. Stansfeld showed a specimen of Acute Pancreatitis from a woman aged 29 who had epigastric pain and pyrexia for a few days. Some of the fat of the posterior abdominal wall was necrosed. There was an ascaris in the duodenum not obstructing the duct. There were two gall-stones in the gall-bladder.—Dr. Stansfeld also showed a Liver with many large secondary carcinomatous growths following the primary growth in the stomach, and a primary malignant growth in the thymus.—Dr. Sidney F. Fouracre showed a specimen of a Congenitally Small Auricle.

A fibrous strand represented the cartilaginous meatus, the middle ear was filled with embryonic gelatinous tissue, the Eustachian tube was a cleft, the malleus was absent, but the auditory nerve was normal.—A fitted dressing bag was presented, on behalf of the society, by Dr. B. G. Morison to the President for his valuable services while secretary to the society.

Reviews and Notices of Books.

The Diseases of Children.

Edited by Dr. M. PFAUNDLER and Dr. A. SCHLOSSMANN. English Translation edited by HENRY L. R. SHAW, M.D., and LINNAEUS LA FÉTRA, M.D. In Five Volumes. Vol. II. (second edition). London and Philadelphia: J. B. Lippincott Co. 1913. Pp. 652. Price £5 5s. for five vols.

THE table of contents of the second volume of the above text-book includes 19 separate chapters on the various infective disorders to which children are subject. It also includes four chapters on metabolic diseases, two on blood diseases, one on the diseases of the new-born, one on prematurity and congenital debility, and several miscellaneous chapters difficult to classify. It will be readily understood from a perusal of this list of subjects that the volume under review not only contains matter of the greatest importance, but also deals with branches of medicine in which great progress has been made since the publication of the previous edition (1908).

Among the subjects dealt with in the chapter on the diseases of the new-born, which is from the pen of Dr. W. Knöpfelmacher, of Vienna, and is translated by Dr. A. S. Maschke, of Cleveland, there is an interesting account of the post-natal activity of the mammary gland and the causes of mastitis. Reasons are given for subscribing to the view that milk secretion in both mother and child is due to the same cause, although proof is still wanting that the cause of the secretion is the cessation of the action of some ferment or chalone elaborated by the placenta. The prophylaxis against mastitis is summed up in the words "protection against trauma"; damage to the superficial epithelium affords a passage to micro-organisms, which wander into the glandular tissues, and these set up an inflammatory reaction. "For this reason expressing the contents of the gland is interdicted, and the secreting gland should be protected from pressure by the application of sterile cotton buffers." In this chapter also are described the other common paths of septic infection in new-born infants, together with the most practical means of prevention, especially in hospitals and institutions where a number of infants may be segregated.

The chapter on prematurity and congenital debility is written by Dr. O. Rommel, of Munich, also translated by Dr. Maschke. Full details are given of the physiology and pathology of the premature infant, and a considerable number of pages are occupied by a very full description of various incubators, including one designed by the author himself. The disadvantages of incubators, especially those in which the head of the infant is imprisoned, are so great that we imagine the somewhat elaborate and complicated apparatus here described will have little interest for English readers. In this chapter Dr. Rommel emphasises the objections, frequently insisted upon in other chapters of the volume, to the practice of artificially cleaning the infant's mouth owing to the extreme vulnerability of the oral epithelium. Among the causes of prematurity and debility in infants prenatal toxæmias in the mother are only incidentally mentioned. Owing to the importance which these conditions have recently assumed in the category of predisposing causes it is regrettable that the translator did not take upon himself the responsibility of adding a footnote or interpolated paragraph calling attention to the work which has been recently published on the subject.

In the chapter on blood diseases, by Dr. A. Japha, of Berlin, translated by Dr. Edward F. Wood, of Wilmington, N.C., a very excellent table is supplied of the blood count, clinical picture, and anatomical findings in 15 different varieties of anæmia met with in childhood. The differential diagnosis between acute lymphatic leukæmia, chronic lymphatic leukæmia, the pseudo-leukæmias, Banti's disease, and a number of other anæmias due to splenic and marrow disturbances is admittedly difficult; and although the classification adopted by Dr. Japha is not that which is most favoured in this country, there can be no doubt that this painstaking tabular arrangement of the hæmatological and clinical distinctions will help many a student to arrive at a correct diagnosis.

The chapter on infantile scurvy, written by Professor W. von Starck, and translated by Dr. Charles K. Winne, of Albany, N.Y., is, in view of the recent discovery of the vitamines, somewhat anachronistic, and further, in view of the considerable number of cases which have been reported, especially in American literature, of occurrences of the disease among breast-fed infants, it is somewhat surprising that the translator or editor does not call attention to the statement of the author that "the few cases of this kind reported in the literature are not free from criticism."

A very interesting chapter is contributed by Professor Pfaundler, of Munich, on the lymphatic constitution, in which he recognises the difficulties of the nomenclature of the complex of symptoms which usually pass under this name, but which is sometimes held to be identical with, and at other times distinct from, the arthritism of the French pædiatrists, and the exudative diathesis of Czerny. He says: "The descriptions of different authors do not make it clear if the three names (quoted above) are really synonyms for the same disturbance, or if we have to assume different anomalies of this kind which have only some common symptoms."

The chapters on the exanthemata are all from well-known German authorities, and may be regarded as authoritative and up-to-date accounts of these diseases. The chapter on malaria, which is included among the specific infections, is an addendum to the English translation. The inclusion of this disease in a text-book for English-speaking readers was regarded as essential for completeness; it has been contributed by Dr. Henry L. K. Shaw, of Albany, one of the editors of the translation under review. Although quite a short chapter, it brings out very clearly the characteristic features of the malarial infection as manifested in the child. The two chapters on syphilis and tuberculosis, the first under the name of Professor C. Hochsinger, of Vienna, and the second under that of Professor A. Schlossmann, of Düsseldorf, are the most important in the volume. They are profusely illustrated with both coloured and uncoloured plates, and they also contain a vast amount of statistical details which should prove of great value to the lecturer and investigator, but which

are clearly outside the requirements of the practitioner.

Taken as a whole the second volume of this important text-book is, in spite of our rapidly growing knowledge of the subjects of which it treats, still the most complete and up-to-date work available to the ordinary reader in a compact form.

Tuberculin in Diagnosis and Treatment.

By Dr. BANDELIER and Dr. ROEPKE. Second English edition. Translated from the seventh revised and enlarged German edition by WILFRED B. CHRISTOPHERSON. London: John Bale, Sons, and Danielsson, Limited. 1913. Pp. 307. Price 15*s*.

THE present (second) English edition of "Tuberculin in Diagnosis and Treatment" is a translation from the seventh German edition of the "Lehrbuch der Spezifischen Diagnostik und Therapie der Tuberculose." Apart from the addition of side-headings, the omission of a few notes unimportant to English readers, and the conversion of doses from cubic centimetres to cubic millimetres in accordance with other recent English text-books, the work has been translated literally.

The new edition has been thoroughly revised and brought up to date, and the subject-matter has been rearranged. This has necessitated an enlargement of the book, and in order to restrict this to definite limits and not to hamper the clear description of specific diagnosis and treatment all matter relating to theory, which was previously scattered through the various chapters, has now been collected into a special section, completed and condensed. It follows the introduction, which describes the present condition of tuberculosis and the tuberculin question.

The specific diagnosis of tuberculosis is again divided into general and special sections. The former has been enlarged to include a more detailed description and a coloured illustration of the intracutaneous test, and to the latter has been added a chapter on the specific diagnosis of tuberculosis of the digestive organs and some new charts to show tuberculin reactions. In discussing the specific diagnosis of tuberculosis by means of the subcutaneous test, minute information is given as regards the technique, and if the directions are carefully followed no difficulty should be experienced in carrying out the process. We would draw special attention, however, to the remarks on the interpretation of result. It is definitely stated that reaction to one of the doses of tuberculin mentioned does not point with absolute certainty to *active* tuberculosis requiring treatment. This statement is in accord with the great majority of observers who have studied the question with entirely unprejudiced judgment. Further, the authors say: "The subcutaneous tuberculin reaction, as such, tells us nothing certain as to the activity or inactivity of the process. It only tells us whether the person tested is infected with tuberculosis, which may be latent and active or latent and inactive. Whether the former or the latter is the case must be decided by clinical observation and by consideration of the history of the patient." It is important that these words should be borne in mind, otherwise a wrong interpretation of the tuberculin reaction is likely to arise.

The section on the specific treatment of tuberculosis is admirably carried out. The different varieties of tuberculin which have been introduced are described at length, the methods of dilution, the sequence of doses, and the results which may be expected being duly considered.

In the concluding section of the book an excellent summary is given of the results which have been obtained, both as regards diagnosis and treatment. Emphasis is laid on the necessity of combining tuberculin treatment with general measures. The authors maintain that the combination of the two modern factors—sanatorium and tuberculin treatment—is the most efficacious method of treatment for active pulmonary tuberculosis at present available, especially when the disease has passed the initial stage. We should go further and say that a combination of measures is essential throughout all the stages of the disease, for it is only by making use of all the therapeutic methods at the disposal of practitioners that success can be obtained. But in order to be able to give tuberculin to the best advantage the greatest care and precaution are necessary, and before any practitioner attempts to adopt its use he should obtain practical instruction, preferably in the wards of a hospital where the patients can be constantly watched.

For general practical information on the employment of tuberculin we can cordially recommend the work we have been considering. Dr. Christopherson has carried out the task of translation most satisfactorily.

Handbook of Physiology.

By W. D. HALLIBURTON, M.D. Lond., F.R.C.P. Lond., LL.D., F.R.S., Professor of Physiology, King's College, London. Eleventh edition. With nearly 600 illustrations in the text, many of which are coloured, and 3 coloured plates. London: John Murray. 1913. Pp. 923. Price 15*s*. net.

A TEXT-BOOK which has reached its eleventh edition should hardly need any words save those of approval and commendation. We cordially congratulate the author on the changes, excisions, and additions he has seen fit to make in the present edition. We think he has done wisely to call to his aid the specific knowledge of Mr. Barcroft, F.R.S., on saliva, respiration, and the kidney. The chapters on these subjects have been greatly improved and brought abreast of all modern research. To Dr. A. F. Hertz, also, the author expresses his indebtedness for useful hints, whereby he has been enabled to bring the chapter on movements of the stomach and intestines up to date. A similar debt in relation to the sense organs is acknowledged to Dr. C. S. Myers, and in regard to the subject of reproduction to Dr. F. H. A. Marshall. The bulk of the volume has not been increased.

We venture to offer a few suggestions for consideration in further issues which may follow. It would surely be well to introduce a few dates of epoch-marking discoveries in physiology. The young reader hardly knows at what period Haller, Wharton Jones, Ludwig, Marey, and others lived, though the period of Erasistratus is given. Some results obtained by means of the string galvanometer are given, but there is no figure of the essential parts of the instrument itself, nor could we find a figure of the ergograph. In some of the coloured illustrations, such as nerve cells, the blues used in printing hardly strike us as well chosen, and at p. 215 the conventional colours used in a diagram of the circulation for venous and arterial blood have been widely departed from—perhaps intentionally. The colours chosen for red corpuscles (p. 455) and those for crystals of hæmoglobin (pp. 462–463) do not strike us as correct. Funke's atlas gives a far truer representation of the colour of blood crystals. Diagrams of the position of the

stomach derived from a study of X ray radiograms are inserted, but there is no reproduction of an actual radiogram. And there is one notable omission that calls for rectification. We have looked in vain for an adequate description of such important acts as walking, running, and other forms of progression. A few lines only are given on p. 107, under the title "Lever Systems." These subjects are not mentioned in the index. Having regard to the variations and anomalies of progression in various diseases, it would seem advisable—indeed, necessary—that the medical student at least should be familiar with the normal physiology of these movements.

This handbook gives an all-round, very readable account of the main features of histology and physiology, such as should be acquired by all medical students as a basis for the further study of the subject on which all practical and scientific medicine must be based.

Stammering and Cognate Defects of Speech.

By C. S. BLUEMEL. Two volumes. New York: G. E. Stechert and Co. 1913. Pp. 755. Price 20*s.* net.

THESE volumes are well worth careful study. The received traditions of the etiology of stammering are admittedly not satisfactory. To state that this failing is due to spasm or to incoördination of muscles is only to bring up the question what causes the spasm or incoördination. The solution of this question is the task the author has set himself in his first volume. His thesis is that the stammerer's difficulty is not one of phonation but the result of transient auditory amnesia, which produces the secondary conditions of mental confusion and fear, these secondary conditions being intensified in some cases by auto-suggestion. It is true that the prime cause of the auditory amnesia may be slight and limited to early life; it may even lessen and disappear, while the secondary effects remain as acquired habits. Such cases are readily amenable to elocutionary methods of treatment.

The first volume is devoted to a full analysis of the psychology of stammering as explained from this point of view. The author reviews the physiology of verbal images and passes on to a consideration of the pathology of brain-centres producing failure or defect in speech, visual amnesia, aphasia, agraphia; in fact, the whole range between mental imagery and voluntary speech. There is nothing new in these chapters, but the material is culled from sound authorities, and written in well-balanced, simple English. The chapter which carries least conviction is that on fear. A good deal of material is introduced which has no proper place, especially the description of Graves's disease taken from Mr. Havelock Ellis and Dr. Hector Mackenzie, which has no real connexion with fear at all, except in so far as fear may cause acute distension of the thyroid, as noted by Dr. Leonard Guthrie. There is no doubt, however, that fear does form a secondary factor in stammering, and increases the incoördination, whether that be psychological or physiological.

The second volume gives a review and criticism of the various methods of training employed in the cure of stammering. These consist in variations of special vocalisation and voice production. A large number of these methods consist essentially in rhythmic practice of enunciation, the syllables being spaced by a mechanical device, such as a metronome. The author's sketch of the methods he has selected is valuable, although his opinion of their worth is not high. But in spite of his belief in the psychological origin of the disability, his estimate of its treatment by psychological methods is no better than that by purely phonetic methods. On the whole the treatment of stammering by hypnotism has been a failure; and the result of an attempt to apply the psychoanalytic process of Freud to stammering has been in most cases negative.

The volume ends with a "glossary" which is nothing short of ridiculous: it consists of 345 pages containing a list of words, some of which are scientific, but many are the most ordinary terms. Who would start to read a book of this pretension who did not know what a "cent" means, or the meaning of "chorea," the "clavicle," or a "circular letter," to select one page at random? It would be preferable to use the word "indisputable" rather than "apodictic," leaving the unfortunate reader to look it up in the glossary. Further, it is quite doubtful if "apodictic" does mean indisputable, though Kant appears to have employed it in this sense. Aristotle and Philo, who both used the word, appear to have meant "capable of demonstration" or "explicable from evidence regularly set forth."

A Guide to the Mental Deficiency Act, 1913.

By JOHN WORMALD, Solicitor, and SAMUEL WORMALD. With a Preface by T. EDMUND HARVEY, M.P. London: P. S. King and Son. 1913. Pp. 155. Price 5*s.* net.

THIS book contains a legal and general exposition of the Mental Deficiency Act, 1913, together with suggestions on organisation for local authorities and others, by the authors, the senior of whom was for many years chairman of industrial schools and special schools, and the boarding-out and care committees for the mentally defective in Leeds. It should prove useful as an explanatory volume for those desiring to obtain a general idea of the objects of the Mental Deficiency Act, and of the means which it provides for carrying them out. These will be found set out in clearly written articles by the authors preceding the full text of the measure. It is, however, to be regretted that the convenient method usual in legal text-books of also annotating the various sections and appending to them the results of the authors' study in the form of explanatory notes should not have been followed, even though in the case of a new law these have to be more or less tentative in character. The index would then naturally have referred the reader directly to the sections containing that which he might desire to investigate. As it is, he will find himself only guided by the index to statements or expressions of the authors' opinion in their prefatory article. It would be more useful, for example, to a justice of the peace or a medical practitioner seeking to ascertain his powers in particular circumstances to be put in touch with them at once, than for the former to find that "justice of the peace" is not a title in the index at all, or for a medical man to find no reference to the duties imposed on his profession by the Act, but only to a recommendation of the authors as to the forming by a local authority of a panel of medical practitioners specially qualified to deal with mental diseases.

LIBRARY TABLE.

The Illustrated Medical Dictionary. By W. A. NEWMAN DORLAND, A.M., M.D. Seventh edition, revised and enlarged. 1913. Pp. 1107. Price 19*s.* net.——*The Pocket Medical Dictionary.* Edited

by W. A. NEWMAN DORLAND, A.M., M.D. Eighth edition, revised and enlarged. 1913. Pp. 677. Price 5s. net. London and Philadelphia: W. B. Saunders Company.—Of the making of words, as of books, there is no end, and it is safe to affirm, as regards new medical words, at any rate, that fully half of them are entirely unnecessary, and more than that proportion are formed in defiance of philological principles, an intelligent attention to which would make them more or less self-explanatory, at least to those whose linguistic education has been properly conducted. However, the words are made and occur in medical literature, and as they do not explain themselves lexicographers find their time fully occupied in providing us with frequent revised editions of their dictionaries. "Dorland's" is well and favourably known for its clear type and easy reference, its general accuracy, and its completeness—we say nothing of its spelling, which in the absence of an equally enterprising English medical dictionary has to be endured. Its modernity is shown in the fact that since the last edition appeared, some two years ago, over 5000 new medical terms, particularly in the fields of physiology, pathologic chemistry, serology, and experimental medicine, have called for definition. The pocket medical dictionary is inexpensive and likely to prove of service to medical students, nurses, and others. It, too, like the larger book, has been increased by the addition of a large number of new words coined in the more recent branches of medical science.

Medicus. Guide-Annuaire des Etudiants et des Praticiens, Médecine, Chirurgie, Odontologie, Pharmacie. 41e Année. 1914. Rédaction et administration. Paris, 41 Rue des Ecoles. Pp. 1740. Price 5 francs.—We welcome the new edition of *Medicus*, which fulfils something the function for France that Churchill's Medical Directory does for Great Britain. It is divided into six parts, of which the first gives the details of medical, dental, and pharmaceutical schools and education, the services of the various hospitals and scientific institutes and colleges, learned societies, and so forth in Paris; the second, similar information for the provinces and the colonies; the third, an account of medical education and colleges in foreign countries; the fourth, a dictionary of medical law and jurisprudence; the fifth, information concerning the practice of medicine and pharmacy and the public medical services; while the sixth is a medical directory of doctors of medicine, officiers de santé, specialists, surgeon dentists, dentists, and pharmacists in Paris, the Seine, the departments, and the colonies respectively. The list of specialists is an addition this year, only stomatologists having appeared under this heading in the 1913 edition. Each of these lists is divided into two parts, an alphabetical list of names and a local directory. There is an excellent index.

Mechanical Treatment of Abdominal Hernia. By WILLIAM BURTON DE GARMO, M.D., Professor of Special Surgery, New York Post-graduate Medical School and Hospital. London and Philadelphia: J. B. Lippincott Company. 1913. Pp. 147. Price 6s. net.—This book is stated by the author to be primarily intended for those persons who have to fit patients with trusses and yet have no medical knowledge, but as it contains a large amount of important and indeed interesting matter on the subject of trusses which is not to be found in the ordinary text-books of surgery, we think that it should prove of service to many medical men. Only too often a medical man merely sends the patient with a hernia to the instrument maker, and does not trouble to see that the truss supplied is suitable in principle and that it fits well. Necessarily, the modern extensive performance of the radical cure of hernia has diminished the use of trusses, but there are cases where an operation is considered unadvisable or where it is refused by the patient, and therefore a knowledge of truss-fitting is of importance. The book is good of its kind. Apparently this is a second edition.

MISCELLANEOUS VOLUMES.

AGAIN a series of books on hygiene, public health, and pharmacy, in continuation of those dealt with last week, may conveniently be considered together here. Six important subjects in public health are dealt with in a small book entitled *Aids to Public Health*, by DAVID SOMMERVILLE, B.A., M.D. Belf., D.P.H. Cantab., M.R.C.P. Lond., F.C.S. (London: Baillière, Tindall, and Cox. 1913. Pp. 146. Price 2s. 6d. net.). They are water, sewage, soil, air, foodstuffs, and antiseptics and disinfectants. The materials are quite up to date, as is evidenced in the references to the Permutit system of softening water, to the recent conclusions and recommendations of the Sewage Commission in regard to the purification of streams, and to Hill and Haldane's work on ventilation. The chapter on antiseptics and disinfectants claims more pages than any other subject, and considering the space at the disposal of the author is fairly exhaustive. There is a printing slip on p. 127. In the section on foodstuffs the author has included some observations on the newly discovered constituent of foods—viz., the vitamines, which appear to be developing considerable importance in regard to the dietetic value of foods.

An interesting account of the methods of disinfection used in practice is given in *Disinfection and Disinfectants*, by M. CHRISTIAN, the physician-in-chief at the Royal Institute for Infectious Diseases, Berlin, translated from the German by CHARLES SALTER (London: Scott, Greenwood, and Son. 1913. Pp. 107. Price 5s. net.). The subject is divided into three sections—viz., physical disinfection (dry heat, moist heat, hot liquids), chemical disinfection (liquid and gaseous disinfectants), and combined systems of disinfection (as in Gärtner's method of disinfecting books, and the steam and formalin vapour apparatus for disinfection on a large scale). In regard to chemical disinfectants only a general idea is given as to the methods of fixing their germicidal value. The object of the book, however, is a practical one, and the information presented should be of distinct service to those who require to carry out disinfection in all its details in an effective and practical manner.——Previous editions of *The Food Inspector's Handbook*, by FRANCIS VACHER (London: The Sanitary Publishing Company, Limited. 1913. Sixth edition. Pp. 311. Price 7s. 6d. net), have received favourable notice in our review columns, and the issue of the present edition, occasioned by the exhaustion of the fifth early last year, shows that the book is appreciated. The author has taken the opportunity thus offered of revising the text and bringing it up to date. In proof of this assertion, references are given to the recent regulations of the Local Government Board in regard to the sale of milk and cream, and particularly to the use of preservatives. The chapters on meat inspection and the diseases of animals reveal an intimate practical acquaintance of the subject, and this section, admirably illustrated as it is with examples, must prove particularly valuable to the food inspector. The author shows himself an expert in this department of inspection.——In *Home Health and Domestic Hygiene*, by Sir JOHN COLLIE, M.D. Aberd., and C. F. WIGHTMAN, F.R.C.S. Eng. (London: George Gill and Sons. 1913. Pp. 189. Price 9d. net), we find a clearly written little work intended for the use of lecturers and students attending home health and hygiene classes. It covers a good deal of ground in homely terms, the chapters in sequence being: The Air, Ventilation, Water, The Dwelling House, Food and Beverages, Infants, Preparation of Food, Clothing, Personal Hygiene, Exercise, and Communicable Diseases. Sensible

observations on the hygienic aspects of these subjects abound, and altogether the book amounts to a very neat presentation of important principles which, if they were observed, would help people to live healthy lives.

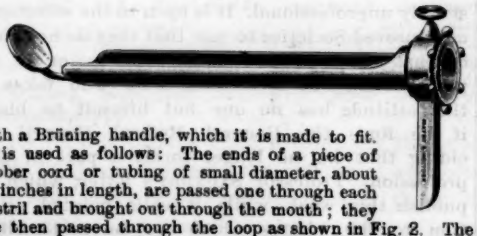
The aim of *Certificate Hygiene*, edited by the Rev. A. W. PARRY, M.A., B.Sc., Principal of the Training College, Carmarthen (London: University Tutorial Press, Limited. 1913. Pp. 113. Price 1*s.* 6*d.*), is to provide a concise account of the main principles of hygiene so far as they are included in the syllabus required for the acting teachers' certificate examination, 1914. It appears to be made up largely of material taken from "School Hygiene," by Dr. R. A. Lyster, and "Physical Education," by Mr. W. P. Welpton, B.Sc. The book deals with such subjects as work and rest, physical and mental deficiencies, infectious diseases and accidents, personal hygiene, school buildings and furniture. It possesses the usual defects of attempts made by laymen to simplify the works of professional writers. As Mr. Parry is not responsible for the accuracy of the material it would serve no good purpose to point out wherein it is defective or extravagant. Where he has attempted to compress and paraphrase, as is evident in the section on first-aid to the injured, the result can hardly be commended. The author states that the purpose of his book will be achieved if it enables the teacher to deal with ordinary matters affecting health in the light of sound common sense. This, we are afraid, it cannot possibly do, although it might achieve another purpose—namely, that of putting a teacher through his hygiene examination. We cannot approve of this class of book.——In *Principal Drugs and their Uses*, by A PHARMACIST (London: The Scientific Press, Limited. 1913. Pp. 95. Price 1*s.* net), the information about drugs is intended for nurses. This information is distributed principally in tabular form, in three columns, headed respectively, "Drug," "Nature," and "Use," the drugs being considered in alphabetical order. There is appended a useful chapter on Antidotes to Poisons, and an introductory section on Poisons and Dangerous Drugs. The paragraphs are capably written, and the comments on the applications of the various drugs are sound.——The Benger's Food Co., Limited, have issued an interesting and instructive monograph on *Alimentary Enzymes*. The processes of digestion are clearly described, and an account of the part played by ferments and activators is included. The book is evidently compiled by a sound physiological writer, and the fact that the merits of the well-known foods and digestive preparations of this firm are brought forward does not detract, in our opinion, from the scientific character of some well-written chapters. When the physician chooses to use these preparations he has the advantage of knowing exactly what they are and the directions in which they may be of value.

New Inventions.

A POSTERIOR RHINOSCOPE.

THIS instrument consists of a tubular spatula at the end of which is a mirror that can be bent to any angle necessary for examination. (Fig. 1.) The spatula is intended for use

FIG. 1.



with a Brüning handle, which it is made to fit. It is used as follows: The ends of a piece of rubber cord or tubing of small diameter, about 18 inches in length, are passed one through each nostril and brought out through the mouth; they are then passed through the loop as shown in Fig. 2. The soft palate is thereby drawn forward (in the same manner as the tongue is in examination of the larynx) and so held in position. This gives ample room for the introduction of the rhinoscope. Sufficient anæsthesia is produced by spraying the floor of the nose with a 3 per cent. solution of cocaine and the application of a 5 to 10 per cent. solution to the soft palate. If a general anæsthetic is used, it is advisable to inject a ¼ gr. of morphia an hour before the operation. The examination of the post-nasal area is considerably simplified by the use of this instrument. It gives an excellent view of the parts, so that the passing of instruments into the Eustachian tubes, operations on the

FIG. 2.

sphenoidal sinus, and in fact almost any operation in the post-nasal area, are no longer in the nature of a step in the dark if this method is applied. It will in many cases obviate the necessity for splitting the soft palate in operations on this area.

I am indebted to Messrs. Mayer and Meltzer, of Great Portland-street, London, W., for their assistance in carrying out my idea.

WILLIAM LLOYD.

Brook-street, W.

TARSAL CYST FORCEPS.

THE frequent use of tarsal cyst forceps in ophthalmic surgery has led me to design one with a view to amplifying, if possible, the advantages of such an instrument. The particular points about the instrument which is here illustrated are as follows:—(1) The size of the opening shown at O is sufficiently great to allow of dealing with a tarsal cyst of large size. (2) Both the upper and lower aspects of the blades are serrated to prevent slipping. (3) The blades are especially shaped as shown at B to allow for the thicker lid edges. (4) The required pressure is exerted by means of a thumb screw S, thus permitting not only more accurate adjustment of the forceps but also more convenient and gentle manipulation during application and removal than is possible with any form of rachet arrangement.

The forceps has been made according to my instructions by Messrs. Weiss and Son, of Oxford-street, London, W.

ARTHUR GREENE, M.D. Dub.,
Norwich. F.R.C.S. Irel.

THE LANCET.

LONDON: SATURDAY, DECEMBER 13, 1913.

Advertising and Canvassing under the National Insurance Act.

AMONG the matters with which the General Medical Council had to deal at the session recently concluded one of the most important was undoubtedly the question of gross abuses that have arisen under the National Insurance Act in connexion with the advertising of the claims of certain practitioners by Approved Societies and institutions which employ canvassers to persuade the public to enter their folds. It is particularly annoying to find this abuse showing signs of again becoming rampant, for in the minds of many the arrival of the National Insurance Act was to abolish such scandals. Advertisements of the merits of the individual practitioners to whom they paid salaries—and as a rule very bad salaries—formed a reprehensible practice of the medical aid associations, whose prevalence was revealed during the long contest known as "The Battle of the Clubs," and one of the arguments invariably employed in favour of the National Insurance Act, while that measure was making its stormy progress towards the Statute Book, was that with the disappearance of contract practice of the kind associated with medical aid associations, we should have a cessation of unprofessional methods of canvassing. It is quite clear from the recent proceedings at the General Medical Council that the old abuses exist strongly among us, and the Council have done wisely in giving prominence to the fact that the disciplinary injunctions, which they had laid down some years ago in connexion with the tactics of the secretaries of medical aid associations, can and will be employed with full rigour against institutions working as Approved Societies under the National Insurance Act, if and when these institutions employ the familiar and discredited tactics.

For it will be remembered that the objectionable methods of various of these bodies led in 1899 and again in 1905 to the publication by the General Medical Council of warning notices to the effect that, inasmuch as certain registered medical practitioners "with a view to their own gain and to the detriment of other practitioners" had acquiesced in the use of objectionable advertisements and "the employment of agents or canvassers for the purpose of procuring persons to become their patients," such practices were now found "to be contrary to the public interest and discreditable to the profession of medicine." Any medical practitioner resorting to these practices was warned accordingly by the Council that he was liable to have his name erased from the Medical Register "for infamous conduct in a professional respect." It is now well known that some of the Approved Societies working under the Act have had resort exactly to these practices. They have advertised the merits of certain practitioners at the expense of other practitioners, and they have canvassed the public in a way that has brought these practitioners to the disapproving notice of the General Medical Council. And the evil, the existence of which has been referred to in our columns several times of late, appears likely to grow if it is not stopped at once. If collective contracting out of the Act, for the formation of institutes run by laymen, becomes common we may be sure that all the old troubles connected with advertising and canvassing will become common also. Our Special Commissioner this week describes in another column the ominous development in South Wales of this contracting-out movement, and it behoves the medical profession to assist the General Medical Council by setting their faces against any degradation of our calling.

In face of this serious position we ask our readers to take heed, for the General Medical Council is in earnest in its intention to stop these discreditable practices. In this attitude the Council is supported by the views of all right-thinking members of the medical profession, and the blame for such occurrences cannot be placed wholly on the shoulders of the erring associations, but must lie to a great extent at the doors of the practitioners in question. For the whole medical profession ought to know through the warnings of the General Medical Council, which have been repeatedly published in our columns and in those of the *British Medical Journal*, if not through an instinctive sense of professional right and wrong, that such actions as advertisement and canvassing must be regarded as strictly unprofessional. It is open to the secretaries of Approved Societies to say that they do not know or that they do not care what is or is not professional, but a medical man who takes up this attitude has no one but himself to blame if he finds the General Medical Council deciding that he no longer forms a part of that profession. Professor SAUNDBY'S letter, which we publish this week, while it calls pointed attention to the abuses which we have described, makes it quite clear that medical men can only serve offending societies at the gravest risk to themselves.

The Mental Deficiency Act.

ALTHOUGH the text of this measure is brief in comparison with that of many modern Acts of Parliament—there are only 43 pages—the Mental Deficiency Act, 1913, is of considerable scope. It is a good example of legislation by reference, since on the one hand it delegates to the Secretary of State extensive powers of making regulations, and on the other it directs the application of certain sections of the Lunacy Act, 1890, to the cases in point. As a result, the Act has little in the way of superfluous wording, but the intelligibility of the official text will be assisted by some analysis of certain of the clauses. Since the Act aims at making further and better provision for the care of feeble-minded and other mentally defective persons, it will be convenient to begin by considering who are the persons who come within the meaning of the Act. The terms embrace: (A) An idiot or imbecile whose parent or guardian takes action; (B) a feeble-minded person or moral imbecile under the age of 21 years whose parent takes action; and (C) an idiot, imbecile, feeble-minded person, or moral imbecile if neglected, criminal, a drunkard, the mother of an illegitimate child, or a "defective child." It is perhaps worthy of note that the legal presumption of an idiot's incapacity ever to attain sufficient understanding to enable him to look after himself or his property is not referred to. It may be remarked, also, that although the feeble-minded are described as requiring "care, supervision, and control for their own protection or for the protection of others," and moral imbeciles as suffering from "some permanent mental defect," such defectives escape control at the age of 21 years unless they also fall within Class C. Members of all three classes may be placed in an institution for defectives or under guardianship, the procedure being the same in the two cases. It seems to be contemplated that some defectives will remain at large, for Section 30 imposes upon the local authority the duty of providing suitable supervision for such persons, and Section 48 sanctions contributions towards the expenses of societies assisting defectives not in institutions without requiring that such defectives shall be under guardianship.

As regards Classes A and B, control of the defective is obtained without the making of an order. In both cases there are required a statement signed by the parent or guardian and certificates in the prescribed form signed by two duly qualified medical practitioners, one of whom shall be a medical practitioner "approved for the purpose by the local authority or the Board" (i.e., the Board of Control), while for cases in Class B there is also necessary the signature of a judicial authority, who, it appears, need not see the person. For Class C the procedure is that of detention under orders. The order takes one of the following forms: (1) An order made by a judicial authority on a petition presented by a relative or friend, the local authority, or an officer of the Board of Control. The petition must be accompanied by two medical certificates (one given by an "approved" practitioner) and by a statutory declaration. The judicial authority must see the case, and the parent or guardian can intervene if the petition has not been presented by him. (2) An order made by a court on satisfactory medical evidence. The court may, however, direct that a petition be presented as in (1). (3) An order made by the Secretary of State. A certificate of two duly qualified medical practitioners is a necessary preliminary. An order requires renewal at the end of the first year, the second year, and thereafter every five years; and the case is to be "reconsidered by the visitors" when the patient reaches the age of 21 years, with right of appeal. Cases not under orders require reconsideration at like intervals. Our hope in the usefulness of the Mental Deficiency Act lies not only in the additional powers it confers, but also in the alteration which it has made in professional views. It may well happen that an effect of the passing of this Act will be an increased utilisation of the provisions of the Lunacy Act if these prove in practice to be cheaper or more convenient. The introduction of the system of guardianship is an experiment of which the upshot is decidedly obscure. Here it will suffice to note that the powers of guardians, in this special connexion, are duly defined; that the local authority may be called upon to provide guardianship; that an order for guardianship may be altered so as to enable the case to be sent to an institution; that a guardian may resign or be removed or replaced by the judicial authority; and that when a court makes an order for guardianship the guardian has to enter into a recognisance. Defectives, according to the class to which they belong, may be placed under control in one of the following establishments: 1. A State institution. This is intended for defectives of dangerous or violent propensities. 2. A certified institution. This description covers buildings provided by the local authority directly or by arrangement with boards of guardians, the Metropolitan Asylums Board, the Prison Commissioners, or other authority. The use of Poor-law premises does not imply that the defective will be deemed to be in receipt of Poor-law relief. The local authority is absolved from certain of its responsibilities if Parliament does not contribute part of the cost. 3. A certified house. No contributions from Parliament or the local authority are payable in this case. 4. An approved home. 5. A private house. It appears from

Section 51 that one defective or alleged defective not under order may be received into an ordinary household if due notice is given to the local authority and the Board of Control. A certain provision of certified institutions, certified houses, and approved homes will be made as soon as the Act comes into operation owing to the repeal of the Idiots Act, 1886, and the taking over of the hospitals, institutions, or licensed houses registered under it. Possibly, too, some of the religious bodies may provide accommodation if, as seems to be assumed in Section 17, there exist sects which are anxious to claim mentally defective persons as members of their respective communities.

In so far as provision has hitherto been made in London for persons belonging to the classes mentioned in the Mental Deficiency Act, this has been done chiefly by the Metropolitan Asylums Board, and Section 30 enables that Board to continue its work as before. The perpetuation of the system of dual control has aroused anticipation of confusion and difficulty in the administration of the Act. It is perhaps the consideration that much of the accommodation for which the local authority is to be responsible will be provided indirectly that has decided the conditions under which the visiting of institutions is to be carried out. It appears from Section 40 that the asylums committee of the local authority, even though constituting, with the necessary addition, the "committee for the care of the mentally defective," will not be the visiting committee as in the case of asylums. Instead of this the visiting is to be effected on the lines of the visiting of licensed houses under the Lunacy Act. For institutions outside the immediate jurisdiction of the Board of Control the visitors will visit six times a year, while within that jurisdiction it is to be presumed that Commissioners or their inspectors will visit six times a year. The discharge of defectives not under order may be effected by the parent or guardian, or by the managers of an institution or home, on the conditions stated in Section 12. By "guardian" is not here meant the person under whose guardianship the defective has been placed. For the discharge by the visitors or the Board of Control of defectives under order directions are given empowering the Secretary of State to make regulations as to "the discharge of patients from institutions."

Constitutional Changes in the British Medical Association.

AT the Representative Meeting of the British Medical Association held in London at the close of last week it was decided by a clear, though close, majority of more than two-thirds of the Representatives that the annual subscription of the Association should be raised to 2 guineas. The financial reasons for the action of the Council in recommending this policy to the constituency have been fully published in the columns of the *British Medical Journal*, and Dr. J. A. MACDONALD, the chairman of the Council, in bringing the matter before the Representative Meeting, put the alternative to the suggested innovation strongly before his audience. He showed that it was not possible for the Association to continue work of the scope which it had undertaken during the past few years without greater financial support, and said that the members of the Association must decide whether they would have curtailment of the work or would bear a heavier tax upon their purses. The support to the proposal of the Council, though not sufficiently large to disguise that the views of the Association are divided, was given in a very hearty fashion.

That the practical issue of the change is not to be calculated upon immediately or exactly is shown by the attitude of the Representatives towards a further proposal to support a fighting fund outside the British Medical Association at an annual subscription of 4 guineas. The scheme brought forward by the newly constituted National Insurance Committee of the Association was that 10,000 members, and presumably more if more were of that mind, should subscribe 4 guineas annually, and that the resulting income should be administered so as, at one and the same time, to form a reserve fund for compensation purposes and a fund for the organisation of medical defence, with properly salaried officers to carry out the work thus indicated. Throughout the scheme the principle was acted upon that those who do the work of the medical profession—whether Local Medical Committees under the National Insurance Act or members of the Representative Body of the British Medical Association—should have their expenses paid by the medical community at large. The proposal proved acceptable in theory to a substantial majority of the Representative Body, but it was resolved to take no steps to organise these novel undertakings until the result to the Association of the raising of the annual subscription for ordinary purposes had become apparent. The Council was instructed to consider the whole question during the ensuing months and to submit its findings to the general body of the members in time for the matter to come before the annual meeting of the Representatives in July next. Any definite decision was thus put off for at least seven months. The anxious nature of the occasion was in this way made manifest, but the feeling of those whose experience in the affairs of the Association gives them the best position from which both to realise the meaning of the present circumstances and to foreshadow what is to come is a distinctly optimistic one.

TO OUR READERS.

Will contributors please note that THE LANCET *of Dec. 20th will go to press on Wednesday, Dec. 17th—a day earlier than usual; and* THE LANCET *of Dec. 27th will go to press on Tuesday, Dec. 23rd—two days earlier than usual!*

Annotations.

"Ne quid nimis."

THE PREVENTION OF HUMAN TRYPANOSOMIASIS IN AFRICA.

THE many difficulties associated with the prevention of sleeping sickness in tropical Africa have hitherto seemed almost insurmountable, and in consequence some experts have taken a somewhat gloomy view of the situation. These difficulties have not been diminished by the discovery lately that other trypanosomes besides T. gambiense give rise to the human disease, and that the infection is conveyed to man by other species of tsetse fly than glossina palpalis. In the circumstances it is gratifying to find that an eminent expert well acquainted practically with the subject has recently spoken in more hopeful terms respecting the possibility of preventing the malady. We refer to an address given last autumn at Washington before the Fifteenth International Congress of Hygiene and Demography, and now circulated in pamphlet form by Professor John L. Todd of Montreal, on the Prevention of Human Trypanosomiasis in Africa. This expert does not shut his eyes to the enormous difficulties of the case, but he expresses the opinion that although there is no single means by which sleeping sickness can be prevented there are several methods by which the disease can be combated; and it is probable that a combination of such methods, embodied in a series of well-administered preventive measures, might ensure a comparatively complete control of the malady, at any rate in some districts. Since some of the influences which help to achieve this control—e.g., clearing away of thick vegetation, reduction of the number of flies, better food and shelter for the natives, along with efficient medical supervision—are those which follow upon the opening up of the country by the European, it may be expected that as the settlement of districts advances the prevention of human trypanosomiasis will become progressively easier. It is generally admitted now that the opening up of the dark continent to commerce and trade in late years has resulted in the spread of sleeping sickness, but Professor Todd believes that the changed conditions following upon the European occupation of tropical Africa will before long do much to limit the extent of the mischief. For instance, the construction of railways will lead to a discontinuance of the passage of large bodies of native carriers, to whom in the past the diffusion of the disease from infected to healthy districts has been largely due. It is also pointed out that a great amount of the research work done during recent years has not been directed to increasing our knowledge of the methods likely to prevent spread of infection. There are still many points which need elucidation; especially is it necessary that search should be made for an efficient method of treating cases of human trypanosomiasis by drugs. The value of the trypanocides already discovered, such as atoxyl and the compounds of antimony, would appear to be sufficient warrant for continuing this search. It may be added that the results of the treatment of Europeans make it quite certain that many cases of sleeping sickness can be cured if they are treated energetically in the early stages of the disease. The importance of gradually educating the natives, particularly the rising generation, in the ways by which a healthier environment can be secured should not be neglected, for this may be made one of the strongest factors in effecting a permanent reduction in the incidence of the disease. In conclusion, Professor Todd maintains that as sleeping sickness can be controlled in many parts of Africa by energetic application of existing methods of prevention, it is not improbable that continued investigation will result in the discovery of more efficient means. Whenever possible, he says, permanent methods of prevention, such as deforestation and the education of the natives, should be employed in preference to temporary measures, such as depopulation of infected districts. Since many wild animals, and especially large game,[1] are found to harbour human trypanosomes, it would probably be a wise measure to destroy all wild animals in the near vicinity of settlements in certain areas and to protect all domestic animals against the bites of tsetse flies.

INTERMENSTRUAL PAIN.

THIS condition is one which is often very distressing to the patient and very trying to the practitioner who finds that all his remedies are of no avail. The name is applied to attacks of pain occurring usually at some definite interval after or before the menstrual period. In some cases, at any rate, the time of occurrence is so regular that the patient is able from it to calculate the date on which the succeeding period will occur; in other cases the pain occurs between the periods, but more irregularly. The condition was first described by Sir William Priestley as long ago as 1872. At that time very little was known with certainty as to its cause, and we know little more of the etiology at the present day. The pain occurs during the period of sexual activity and is apparently commoner in sterile women. Not infrequently there is a history of a preceding pregnancy or miscarriage, and sometimes, as in some of the cases recorded by Kelly, the pain has ceased entirely during pregnancy and lactation only to return on the establishment of menstruation. The most frequent time for the occurrence of the pain is during the second half of the intermenstrual period, and it would appear to be associated with the period which follows rather than with that which precedes it. As in the case recorded by our correspondent (see p. 1738), it generally lasts as a rule only one or two days, and, as in that case, the menstrual periods themselves are often regular and free from pain. Intermenstrual pain therefore is not usually associated with dysmenorrhœa. Its situation is most commonly in one or other ovarian region, but it may be located in any part of the lower abdomen. Very varying pathological conditions have been found in association with these attacks of pain; for instance, salpingitis, salpingo-ovaritis, hydrosalpinx, enlargement and tenderness of the ovary, displacements of the uterus, fibroid tumours of the uterus; but in a large number of the cases the pelvic organs are healthy to ordinary physical examination. When a definite pelvic lesion exists, in some of the cases its treatment has resulted in the cessation of the pain but not always, and while some of the cases appear to be dependent upon such abnormalities as a displacement of the uterus, in the majority of the cases no pelvic lesion can be found, and the result of treatment is most unsatisfactory.

[1] THE LANCET, Nov. 29th, 1913, p. 1560.

Dilatation and curettage as a rule are quite useless, and the administration of thyroid and ovarian extracts is generally equally inefficacious. In some cases relief has followed the removal of one or both sets of uterine appendages, but when only one ovary is removed the result is often most disappointing. Indeed, in no case should such an operation be performed until all other methods of treatment have failed, and it is not justifiable to remove both the ovaries without at any rate first trying the result of treatment with X rays or of removing the uterus. In this class of case, however, it is not likely that hysterectomy will give the relief it affords in cases of uterine dysmenorrhœa, because all the available evidence points to the origin of the pain being the ovary and its actual cause painful ovulation. This view was originally expressed by Priestley, and is probably the correct one. Indeed, the little we know of this curious condition seems to show that it is related to the ripening of the Graafian follicle and the approaching discharge of the ovum, and its association with attacks of pelvic peritonitis is supposed to be due to thickening of the tissues on the surface of the ovary or the production of adhesions round it by the previous inflammation. If this view is correct the failure of the ordinary methods of treatment to relieve the pain is readily explained. It is important that a larger number of these cases should be recorded in greater detail in order that our knowledge of the matter may be increased.

THE USE OF THE CANE.

AT the Westminster police-court recently Mr. Horace Smith heard one of those cases of not infrequent occurrence in which a master in an elementary school is prosecuted for assaulting a pupil by caning him. In this particular case, after hearing evidence on both sides, the learned magistrate was of the opinion that no unnecessary violence had been used, and dismissed the summons. The result appears to us to be a satisfactory one because the defendant, a pupil teacher, was a young man to whom conviction for such an offence would have been a serious matter occurring at the outset of his career; because it would not be pleasant to find little boys under an educational system as elaborately organised and carefully supervised as ours were liable to be cruelly punished for not learning their lessons; and also because moderate corporal punishment may afford an aid to discipline among boys which it would be very difficult to replace satisfactorily. In the case referred to two stories were told—that of the boy, 11 years of age, who said that he was laid across a desk and caned because he could not do the sums set him, and that of the teacher, who said that the boy was impudent, that this was a repetition of former misconduct, and that the cane was applied while he was sitting at his desk. That the boy had been impertinent was apparently admitted. With regard to the extent of the punishment medical evidence was given to the effect that there were about 15 wheals upon the boy's back when his father took him in the evening to a medical man after he had complained a second time; but his mother, whom he had told of the incident in the middle of the day, had not thought enough of the story to examine him then. The marks were evidently sufficient to show that he had been chastised with some severity. Mr. Horace Smith, a magistrate of considerable experience, took the view that the severity was deserved, and that the parents had formed an exaggerated opinion of the amount of force that had been used. A blow from a cane causes at the time an appreciable amount of pain (which, by the way, is what it is intended to do), but it leaves behind a mark quite out of proportion in its formidable character to the amount of suffering which it causes after the first sting has been endured. If any one doubts this, having perhaps avoided the opportunity to observe it in the course of an exemplary boyhood, the experiment is easily made. Any small boy will be willing to do his share by inflicting upon the seeker after truth a sharp cut or two, the results of which will no doubt be distinctly felt for a time, but only for about an hour, but there will be visible on the well-protected and tender skin of the back for some days wheals which would harrow the heart of any mother. In our big public schools, the sort that are called public because they are strictly private, canings are still inflicted, though on rarer occasions than formerly, by masters, and by senior boys upon their juniors, such as no teacher under the Board of Education could inflict and retain his position; and this is quite right, for the subjects of a compulsory and rate-paid routine must be specially protected. In proprietary schools, however, the use of other forms of punishment is comparatively feasible. In those in which small boys, often drawn from the roughest and least disciplined classes, attend for a few hours at a time, the need of a penalty which can be exacted on the spot and done with must necessarily make itself felt. No one wishes that it should take the form of a thrashing administered brutally or in the heat of temper, but a caning administered carefully and quietly may have a very salutary effect.

FATAL MENINGITIS FIFTEEN YEARS AFTER A BULLET WOUND OF THE BRAIN.

IN the *Archives of the Middlesex Hospital* for October Dr. W. Pasteur has reported a remarkable case in which fatal meningitis occurred 15 years after a bullet wound of the brain. A married man, aged 39 years, a barber, was admitted in a state of semi-coma following a general convulsion. The history, subsequently obtained, was that he had always been delicate, but had not had any serious illness. Fifteen years ago he attempted suicide by shooting himself with a revolver in the middle of the forehead. He was treated at St. George's Hospital. Of his subsequent history nothing was known except that he was treated a few years ago at the Middlesex Hospital for an abscess of the forehead. His present illness began nine days before admission with headache, which had grown progressively worse in spite of treatment. While waiting to be seen in the out-patient department he had a general convulsion. On examination he was semi-conscious and ground his teeth occasionally. The pupils were equal and active. The knee-jerks were present and equal. There was no obvious sign of paralysis. The breathing was easy and regular. The pulse was 132, regular, and of normal tension. Soon after being put to bed three general convulsions occurred in rapid succession. A specimen of urine obtained shortly afterwards contained a little albumin. During the evening he remained semi-conscious, and during the night became rapidly worse. The respirations rose to 72, with increasing duskiness of the surface. Some urine drawn off towards morning was brightly coloured with blood. The coma deepened and

death occurred at midnight. The temperature throughout was about 102°F. At the necropsy a linear scar two inches long was found on the forehead half an inch to the left of the median line, and in the centre of this was a circular scar a quarter of an inch in diameter. The pia mater was greatly injected, and there was extensive meningitis of the convexity, the outlines of the larger vessels being obscured by yellowish exudate and a small quantity of creamy pus. Except under the left frontal lobe, where the convolutions were adherent to the membrane, the change was confined to the convexity. On cutting under the scar on the forehead the left frontal sinus was found replaced by a mass of dense cicatricial tissue, and the bone at this spot was wanting, giving rise to a small slit. The orbital plate of the frontal bone was also defective for an area half an inch square, and at this spot the mucous membrane was reddened, and was probably the channel by which meningeal infection occurred. A small-bore bullet was found encapsuled in the under surface of the left temporo-sphenoidal lobe. The nasal sinuses showed well-marked inflammation, and the left ethmoidal sinuses were somewhat reddened. The kidneys had the appearances of chronic tubular nephritis with an acute process superadded. Dr. Pasteur points out that viewed by the light of the post-mortem findings the case presented no difficulty. But on admission, in the absence of any previous history, the diagnosis was by no means easy. The symptoms might well have been due to uræmia. The long interval since the injury naturally produced caution in accepting it as the cause. The occurrence of fatal meningitis 15 years after a bullet wound renders the case of considerable medico-legal interest. During life the diagnosis of meningitis was favoured chiefly on the grounds of the sustained high temperature and the absence of definite indications of nephritis in the urine and circulatory system. The amount of albumin present could reasonably be ascribed to congestion due to the repeated convulsions, though the same argument could be used to account for the pyrexia. It is interesting that the state of the kidneys found post mortem might well have given rise to symptoms of uræmia, and Dr. Pasteur thinks it possible that this acted as a contributing cause of the convulsions.

GLANDERS IN HUMAN SUBJECTS.

GLANDERS is a disease which excites interest by its variable character, the difficulties in its diagnosis, its grave danger to life, and the risks run by those brought into contact with cases, whether occurring in man or animals. This interest has been further increased by the occurrence within recent years of a number of cases due to the accidental inoculation of workers in bacteriological laboratories. The three cases recorded in this number of THE LANCET by Mr. H. M. M. Woodward and Mr. K. B. Clarke exhibit the confusing characters of the disease in a striking manner; the symptoms varied in the several cases, and were very unusual in character, as was also the source, at least in one case, from which the bacillus was isolated. The important features of the cases are clearly indicated and discussed by the authors of the paper, and they appear to believe that cases of glanders are more numerous than is generally thought. It is, unfortunately, not stated within what period these cases occurred. The diagnosis of glanders rests on a bacteriological basis, and undoubtedly many cases with pustular eruptions are regarded and treated as septicæmic rashes until the bacillus is discovered. As these cases are not specially isolated, and as the discharge of bacilli from the pustules is very copious, the late diagnosis would appear to be a source of considerable danger, though in our experience infection has not spread either to nurses or patients in neighbouring beds. Complete bacteriological examinations appear to have been made in all the cases, the results being summarily recorded. It would be of great interest if the grounds on which the infecting organisms were identified as B. mallei were given at greater length. Perhaps on some other occasion the writers will furnish those details, which, in view of the unusual source of the culture in the first case, and the existence of a single cerebellar abscess from which alone the organism could be isolated in the last, would be of considerable bacteriological interest.

JOHANNES EVANGELISTA PURKINJE.

Now that the study of the history of medicine is coming to its own and the memory of its pioneers is being kept green, we should be grateful to those who collect for us from scattered sources information about men of whom very little is generally known. We all have a nodding acquaintance with most of the historical leading lights of medical science, but there are some who are to us merely names derived from eponymous terms descriptive of parts of the body, diseases, methods, and so forth. Dr. Isaac Ott, of Philadelphia, in his recent introductory address at the opening of the Medico-Chirurgical College of that city, has done service in regard to Purkinje, with whose name we are all, of course, familiar, though for many of us probably it has little if any connotation beyond giving a name to certain cells and fibres. Johannes Evangelista Purkinje was born in 1787 at Libochowitz, in Bohemia, on the northern border of Austria, a province which also produced Mendel and Czermak. He graduated at Prague in 1819, when he became assistant in the anatomical institute. He became acquainted through Goethe with Alexander von Humboldt, who, in conjunction with Rast, the anatomist, recommended him for the chair of physiology at Breslau, to which he was appointed in 1821, at the beggarly stipend of 800 thalers per annum, out of which he had to provide for demonstrations and experiments. There was practically no provision for instruments or apparatus, and when in 1830 Purkinje asked the curator for a microscope, which then cost 200 thalers, the latter replied that so costly an instrument would necessitate a joint requisition from the professors of physics, astronomy, anatomy, and botany, and himself! It was obtained for their joint use, but two years later Purkinje succeeded in establishing a claim to its exclusive use. Now, however, another difficulty faced him—that of a suitable demonstration room, for his room in the old astronomical institute had been taken from him through the animosity of Otto, the professor of anatomy, who from the first had taken exception to his speech (his native tongue was Czech), and considered that though he might be a useful *privat-docent*, he was not up to professorial standards. However, another room was found for Purkinje, who in 1831 made a request for an independent physiological building, a laboratory assistant and a servitor, and a grant towards the institute, but these were refused on the ground that no German

university had a separate building for physiological work. Even when the new anatomical institute was built, Otto forestalled Purkinje by claiming the only available room for his official residence. But Purkinje was not to be daunted. He arranged a physiological laboratory in his private residence, and there he continued the work with which his name is now associated all over the scientific world. To refer only to some of his discoveries, Purkinje's figures, his study of the curvatures of the eye, his method of lighting up the retina (in some sort anticipating Helmholtz), his observations on vertigo, his general idea of the cell—published two years before Schwann's classical work,—the Purkinje vesicle in the ovum, the Purkinje corpuscles in bone, the interglobular layer in dentine, the ciliary movement in the respiratory organs, the sweat glands and their ducts, the stomach glands, the touch papillæ, the action of the pancreatic juice on albumin, all testify to his activities. A more liberal curator in 1836 obtained for Purkinje a grant of 3800 thalers and a site for an independent physiological institute which was opened in 1839—the first physiological institute in the world. Unfortunately the maintenance funds of the institute were not commensurate with the institute itself, and his subsequent work was mainly microscopical. In 1850 Hungarian politics took him to Prague, and his scientific labours were practically over. He died in 1869. His career was an example of the way in which a determined mind overcomes opposition and surmounts obstacles.

ERYTHEMA NODOSUM AND TUBERCULOSIS.

IN the gradual evolution of our conception of rheumatism as an infective process almost as definite and individual as tuberculosis or syphilis, some of those phenomena which were formerly regarded as rheumatic in nature have been examined in the light of more accurate knowledge and broader conceptions, with the result that they have dropped out of the rheumatic category and have not yet found their actual relationships. Prominent among these unclassified phenomena is erythema nodosum, regarded by some as a specific infection of itself, by others as a mere anatomical expression capable of arising in the course of any infection of a suitable grade of intensity. A third view which is making headway receives strong support from the case reported by Professor L. Landouzy in *La Presse Médicale* of Nov. 19th.[1] A domestic servant, 27 years of age, was admitted to the Laennec Hospital after a fortnight's illness beginning with fever and sore-throat and developing into a generalised arthralgia with erythematous nodes on the ankles, knees, and great toes. On examination these proved to be the characteristic lesions of erythema nodosum. A blowing systolic murmur was noted at the apex, which was regarded as organic because it persisted. There was moderate pyrexia, also persistent, and some little evidence of tuberculous infection of the apex of the right lung. These signs increased, and the cutaneous tuberculin test reacted positively. The blood of the patient was cultivated, and injections were made into the peritoneum of two guinea-pigs but without result. On the other hand, an erythematous node removed from the forearm the day following its appearance was examined with results of the highest significance. Histologically the appearances were those of an acute inflammation, most pronounced in the connective tissues lying immediately beneath the skin, and notably vascular and perivascular in its arrangement. Deeper still the fatty tissues were freely infiltrated by an inflammatory exudate abundant in cells and in fibrin. Predominant among the cells were the polymorphonuclear leucocytes, in which early evidences of regressive processes were noticeable. In addition to these cells, grouped in masses like small abscesses, there was a diffuse mononuclear leucocytosis, plasma cells being absent. The fixed connective tissue cells of the part had barely reacted, but the vascular endothelia displayed intense proliferative tendencies resulting on the one hand in the formation of new capillaries, on the other in partial or complete occlusion of vascular channels. No giant cells of the tuberculous type were discovered, but in a clot which filled one of the proliferating vessels the application of the Ziehl-Neelsen method of staining discovered acid-fast bacilli. Not only so, but a guinea-pig inoculated with emulsion made from another portion of the erythematous node showed evidences of tuberculous infection at the site of inoculation and throughout the whole body. Professor Landouzy claims with considerable emphasis that these observations prove that erythema nodosum is, in some cases at least, a septicæmic form of tuberculosis, a view which he has held and proclaimed for some years, but without such evidence as is afforded by the case which we have briefly reported above.

[1] THE LANCET, Dec. 6th, 1913, p. 1656.

THE DEPENDENCE OF LEPROSY ON FISH EATING.

A DOCTRINE of the late Sir Jonathan Hutchinson which did not gain acceptance is that leprosy depended on fish eating. Yet there was none he advocated with more persistence during his long life. Indefatigable industry and all the resources of a subtle intellect, equally keen in observation and in deduction—and what clinician was so keen?—were exerted in vain. He marshalled an extraordinary amount of evidence—clinical, historical, and geographical—with his usual dialectic skill. In his old age, when most men would have considered their work done, he made two voyages—to South Africa and India—to investigate certain matters on the spot. He maintained that the only hypothesis which explained all the facts was that leprosy was due to eating decomposing, badly cured fish. We need not enter into his arguments, as they are so well known. They can be found in full in his book "On Leprosy and Fish Eating."[1] That they are very strong cannot be gainsaid, but they failed to carry conviction because he could produce no evidence that the bacillus lepræ is any way associated with decomposing fish. While insisting that the "circumstantial evidence is overwhelming" that decomposing fish is the cause, he was not sure as to the manner in which it acted, and made several suggestions, without committing himself to any. As to the discovery of the bacillus in fish, "I am," he said, "much less sanguine than I was some years ago."[2] He suggested that its occurrence might be "exceedingly rare" and that contamination of the fish might be "usually effected by the hands of a leper fish-curer." Many regard

[1] On Leprosy and Fish Eating. London: Constable and Co. 1906.
[2] Loc. cit., p. 48.

this fish hypothesis as only an eccentricity of a great mind. But some who have come under its influence will remember that Hutchinson was many times right when the whole weight of opinion was against him, and that his clinical acumen often penetrated successfully far beyond the range of the pathology of his time. They will read with interest some recent observations which tend to supply the deficiency of bacteriological evidence of the fish hypothesis. In the *American Journal of the Medical Sciences* for November Dr. A. J. Smith, professor of pathology, Dr. K. M. Lynch, instructor in gross morbid anatomy, and Dr. D. Rivas, assistant director of the Laboratory of Tropical Medicine, University of Pennsylvania, have published an article on the Transmissibility of the Lepra Bacillus by the Bed-bug. They have shown that this animal on biting lepers may take the lepra bacillus into its alimentary canal. There for a time the bacilli increased in size and apparently in numbers, but they eventually disappear. Infected bugs were found sometimes to transmit the bacilli to the skin of an animal bitten by them, but no evidence is produced to show that in man the disease is communicated in this way. Only as a digression is the fish hypothesis discussed. The authors confirm from their experience the success of Duval and his associates in readily infecting fish with the bacillus lepræ.[3] The organism rapidly appears in the various organs of the body, though the fish apparently remained unharmed. The authors are inclined to agree with Couret and Duval that fish and other cold-blooded animals, such as turtles and snakes, may represent the true habitat of the lepra bacillus, and that warm-blooded animals, including man, are relatively or absolutely resistant and require special dosage to ensure infection or special predisposition to become infected. That the disease may be acquired from infected and uncooked or imperfectly cooked fish, they think, does not seem very improbable. The belief that rotten fish is particularly dangerous they consider to be singularly substantiated by the fact that the cultivation of the bacilli of leprosy in the laboratory is favoured by media containing the products of digestion and cleavage of proteids. While unwilling at this stage to advocate further the hypothesis of Sir Jonathan Hutchinson, they consider it to be worthy of more careful study than it has received.

EPSOM COLLEGE.

IN another column we print a letter from Sir Henry Morris, honorary treasurer of Epsom College, in which he draws attention to the educational advantages offered by the College; to the charitable work accomplished by the Royal Medical Foundation attached to the College, which is now threatened with curtailment through lack of funds; and, thirdly, to the needs of the College chapel. Further information concerning these matters will be found in our advertising pages this week, where detailed announcements are made by the bursar and secretary of the College. We gladly give prominence to the appeals made by Sir Henry Morris, Mr. Douglas Crossley, and Mr. Bernard Lamb, and we are confident that when the circumstances are realised the medical profession, which has given generous help in the past, will do its utmost to place the institution, founded by John Propert half a century ago, in a position of permanent financial security.

[3] Couret: Journal of Experimental Medicine, May, 1911, xiii., 576.

THE report of the Departmental Committee on celluloid was issued this week. We have recorded in this journal from time to time the results of our own experimental inquiries upon celluloid, and have urged the desirability of regulating the sale and storage of this substance, in order that the public may be safeguarded against its dangers more effectively than is at present the case. The Committee's recommendations are of considerable importance, and we hope to deal with them in a future issue.

A LECTURE will be given at the Royal Society of Medicine, 1, Wimpole-street, London, W., on Wednesday next, Dec. 17th, at 5 o'clock, in connexion with the Section of the History of Medicine, by Professor Richard Caton. The subject is "The Health Temples of Ancient Greece, and the Work Carried on in Them," and the lecture will be open to all who are interested.

IT was stated by the chairman of the General Purposes Committee (Mr. Ernest Gray), at the meeting of the London County Council on Dec. 9th, that the committee could not recommend acceptance of the scheme prepared by the Metropolitan Asylums Board for the provision of an ambulance service for London. An alternative scheme may be presented at the next meeting of the Council.

WE much regret to announce the death of Mr. Sydney Jones, consulting surgeon to St. Thomas's Hospital, and one of the best practical surgeons in London of his day. Mr. Sydney Jones was in his eighty-third year. We shall publish an obituary notice next week.

LONDON HOSPITAL MEDICAL COLLEGE (UNIVERSITY OF LONDON).—A course of 24 special lectures on Syphilology will be held at this hospital during February and March, commencing on Feb. 3rd.

FOREIGN UNIVERSITY INTELLIGENCE.—*Berne:* Dr. R. von Fellenberg has been recognised as *privat-docent* of Gynæcology and Midwifery.—*Breslau:* Dr. Gräper has been recognised as *privat-docent* of Anatomy.—*Greifswald:* Dr. Paul Roemer, professor of hygiene in Marburg, has been offered the chair of that subject in succession to Dr. Loeffler, who is going to Berlin, and Dr. Egon Hoffmann, *privat-docent*, has been appointed to give the University lectures on Otology and Laryngology, in place of Dr. W. Lange, who is going to Göttingen.—*Kiel:* Dr. Boehm, *privat-docent* of medicine, has been appointed Oberarzt of the University Medical Clinic, and Dr. H. Koenig has been recognised as *privat-docent* of Psychiatry.—*Marburg:* Dr. Paul Rohmer has been recognised as *privat-docent* of Children's Diseases.—*Paris:* An Institute of Hydrology is to be attached to the Collège de France, which will contain a physical laboratory under the direction of Professor d'Arsonval, a laboratory of hygiene under Professor Bordas, a laboratory for chemical analysis under Professor Urbain, and a laboratory for physical chemistry under Professor Moureu.—*Prague (Bohemian University):* Dr. Wenzel has been promoted to the chair of Midwifery and Gynæcology in succession to Dr. Pawlik, who is retiring, and Dr. Wenzel Rubesco, *privat-docent* of midwifery and gynæcology, and Dr. Emmanuel Formanek, *privat-docent* of medical chemistry and toxicology, have been granted the title of Professor.—*Vienna:* Dr. Josef Herzig, extraordinary professor, has been promoted to the chair of Pharmaceutical Chemistry.

MEDICINE AND THE LAW.

A Medical Man's Powers in Cases of Insanity.

AN inquest was held recently at Hammersmith upon the body of a young woman who had committed suicide by hanging herself in the kitchen at her home. The medical man who had attended the deceased, a panel patient, stated that he had considered her to be suffering from melancholia and had advised her removal to an asylum. Her parents had, however, been very unwilling to take this course, and had declared that they would take care of her themselves. This raised the question before the jury of the powers and duties of a medical practitioner in the circumstances described, and the witness expressed the opinion that he could only advise certification and treatment in an asylum, and that as a medical man on the panel he could not refuse to continue to attend his patient. With reference to this case Dr. Major Greenwood called attention in the *Times* to the powers given to the relieving officer under Section 13 of the Lunacy Act, 1890, to take steps on receiving notice as to a person of unsound mind residing in his district and not under proper control, the authority thus conferred not being confined to the case of paupers. There can be no doubt that cases of the kind described place a medical practitioner in a very difficult situation, the difficulty varying according to the condition of the individual patient. The practitioner here appears to have acted quite correctly; there was no obligation upon him to embroil himself with the patient's parents, or indeed with her, by taking active steps to secure her certification. The responsibility for refusing the proper protection to the patient and the public lay with the parents.

The Jurisdiction of Courts of Law and the National Insurance Acts.

In the Manchester county court recently a factory operative named Clancy sought to recover £1 17*s.* sick benefit denied to her by her society on the ground that she had been found fit for work. The county court judge was informed that the plaintiff had been examined by a medical referee and had appealed against his decision that she was not incapacitated to the Insurance Commissioners, who had decided against her, and it was submitted that the county court had no jurisdiction. This view the county court judge accepted, and he declined to hear the case. We refer to it on account of the distinction thus drawn between it and the case raising the question of rubber stamps for signatures, which was tried by his honour Judge Rentoul[1] at the City of London Court recently. In that case, apparently, it was held that the point to be decided lay outside those which the Insurance Act, 1911, ordered to be decided by arbitration or according to the rules of the Approved Society concerned. Clancy's case was one for the decision of which machinery was provided by the Act. It is clear that the powers enjoyed by courts of law to intervene in disputes concerning the administration of the National Insurance Acts are by no means clearly defined, and the question whether there is jurisdiction or not seems likely to come up for decision frequently.

[1] See THE LANCET, Dec. 6th, 1913, p. 1668.

NOVEMBER AT HOME AND ABROAD.

THE general character of the weather during November was very mild over the entire area of the British Isles and much of the region surrounding, the mildness being chiefly due to the persistence of winds from some point between south and west. These winds, blowing an occasional gale on some parts of the coast and sometimes at exposed places inland, never allowed the thermometer to fall to the normal November figure during the daytime, and the only frost that was experienced at night occurred during a quiet interval after a cyclonic disturbance had passed off and before the arrival of its successor. These mild winds from the Atlantic brought much cloud, from which descended a good deal of rain, but there were frequent clearances which allowed a liberal share of sunshine for the time of year. If the Kew observatory is taken to represent the London district it is found that the mean maximum temperature was nearly 5° in excess of the normal, the figure being 53·5°, and that the mean minimum was 40·3°, or nearly 2° above the normal. At Bath the temperature was rather higher, and the divergence from the average also rather more marked, and at Nottingham, where the mean maximum was 52° and the mean minimum 38°, the excess of warmth was similar to that in London. At Brighton and Bournemouth the respective maxima were 54° and 55°, and the minima 45° and 43°, all the values being 4° above the normal, while in the extreme south-west of England the same characteristic was general. At Newquay, where the moist winds from the ocean brought much mist and fog, the mean maximum was 54°, but Torquay, which rarely suffered from fog, had a mean maximum of 56°. At night, however, Newquay was the warmer, having a mean minimum of 47°, or 2° higher than Torquay. At Jersey the mean minimum was the same as at Newquay, and the mean maximum as high as 57°. Over the country as a whole the rainfall exceeded the average, but there were some exceptions, and the quantity varied considerably. At Newquay only four days were entirely rainless, and the total fall, 4·5 in., was 0·7 in. above the average. At Brighton the fall was larger, 4·6 in., and the difference from the average nearly 1·5 in. There were, however, as many as 11 days without rain. Bournemouth was relatively dry, having 17 days without rain, and a total fall no greater than 2·9 in. At Kew rain fell on 18 days, and gave a total of 2·2 in., a figure just equal to the average, and in the Midlands, at Nottingham, the total was only 1·6 in., or 0·3 in. below the normal, and the number of rain days 19. The Channel Isles came within the most rainy region. At Jersey, where 23 days were more or less wet, the aggregate fall was 4·8 in., an excess of 0·6 in. on the average. The distribution of sunshine showed some striking peculiarities. In spite of the numerous days with rain, very few were entirely sunless, considering the period of the year. At Kew the sun shone on 22 days, and yielded a total of 70 hours, against a November average of 51 hours. At Bath the total was 73 hours, or 14 more than the average, and at Nottingham there were 53 hours, an excess of 13. Along the south and south-west coasts some places had an excess and others a slight deficit. At Brighton the excess was only 1 hour, the total being 74 hours, only 4 hours more than at Kew, while at Newquay the total was 67 hours, or 7 hours less than the average. Torquay, on the contrary, had an excess of 12 hours, and a total of 94 hours, and Bournemouth recorded as many as 89 hours. At Jersey the figure was below that at Kew, which is a most rare occurrence at any season of the year. The aggregate was only 67 hours against an average of 77 hours. According to the average of the past 25 years Jersey records nearly an hour more daily than Kew. As in this country, the weather on the continent was mostly mild and rather rainy. At Paris the mean maximum temperature was 54° and the mean minimum 44°—a very small range for Paris—and the rain, which fell on 19 days, gave a total of 2·5 in. The chief feature about the Paris weather, however, was the great lack of sunshine. On no less than 15 days the sun failed to shine at all, and the other 15 days only yielded a total of 30 hours, or less than half of the number recorded at Kew. Berlin was colder, with a mean maximum temperature of 50° and a mean minimum of 40°, while Brussels came midway with a mean maximum of 52° and a

mean minimum of 43°. Brussels, with 19 rain days, had a total higher than Paris, but at Berlin the total was no more than 2·1 in., divided between 17 days. In the extreme south-west of France the rain was both frequent and heavy. At Biarritz only nine days were rainless, and the large total of 7·7 in. was registered. The temperature at that resort was the same as at Jersey during the daytime, the mean maximum being 57°, while the nights were colder, the mean minimum being as low as 42°. The Riviera experienced a few heavy downpours of rain, but the general state of the weather was fine and bright, and the temperature fairly high. At Nice rain fell on only nine days, giving a total of 3·4 in., while the mean maximum temperature of the afternoon was as high as 61°. The nights, however, were no warmer than those at Newquay, the mean minimum temperature being 47°. In Italy occasional rain was experienced over the northern half of the country, but hardly any in the south, and the weather generally was drier than usual in November. Early in the month the shade temperature rose to 70° frequently, and towards the end it was often nearly as high in the southern regions. But in the north, especially inland, the thermometer was usually little or no higher than in the south and south-west of England. The coast of Algeria decreased greatly in warmth as the month advanced. Early in the period the temperature of the afternoons was generally between 70° and 80°, but towards the end the figure of 70° was seldom reached. As a rule the weather was bright and dry, and when there was rain it was rarely heavy.

ROYAL COMMISSION ON VENEREAL DISEASES.

AT the sixth meeting of the Royal Commission which was held on Dec. 1st evidence was given by Dr. Burnett Ham, who from 1909 until this year was head of the Health Department in the State of Victoria, describing the measures which have recently been taken in connexion with venereal diseases in that State.

In 1908, at the meeting of the Australian Medical Congress, the following resolution was passed:—

That syphilis is responsible for an enormous amount of damage to mankind, and that preventive and remedial measures directed against it are worthy of the utmost consideration.

Following upon this resolution a deputation waited upon the Premier of Victoria in 1909 to urge the consideration of this matter, and as a consequence Dr. Ham was directed to draw up a scheme for the investigation of the subject, and an advisory committee, consisting of the leading medical men and women in Melbourne, was appointed to act with him.

As a first step to ascertain the facts as precisely as possible it was decided to make syphilis a compulsorily notifiable disease in the Melbourne metropolitan area. In actual practice the compulsory nature of the notification was not insisted upon, as no penalties for failure to notify were enforced, but it was felt that unless an official flavour was given to the requirement to notify, the response from the medical practitioners would be small. There was at first some opposition on the part of the medical profession to the proposed notification, but this was to some extent removed when it was made clear that the notification was to be impersonal, that no names were to be given, and that consequently no administrative action could be taken on the notification so far as the patient was concerned.

As a matter of fact, during the year in which the notification order was in force only 110 out of the 350 to 400 practitioners in the metropolitan area actually notified cases. Thus the measure adopted was not compulsory notification as ordinarily understood, but rather an experiment made with a view to ascertaining the amount of syphilis in the city. In connexion with the notification arrangements a circular was issued to medical practitioners explaining the kind of cases they were expected to notify, and they were also asked to supply with each notification a sample of the patient's blood for the purpose of testing by the Wassermann reaction.

In the course of a year 5500 notifications were made and an equal number of samples of blood submitted; 3500 of these notifications were made by private practitioners, 900 by the Melbourne Hospital, and 1100 by the Eye and Ear Hospital. Of the 5500 Wassermann tests for syphilis which were carried out, 1900 gave positive and 400 partial reactions, and it was calculated that this corresponded to a number of syphilitic cases equivalent to 0·5 per cent. of the population of the area; this figure was very much lower than had been anticipated.

An investigation was also carried on at the eye and ear cliniques of Dr. J. W. Barrett. All patients presenting themselves during a certain period, irrespective of the disease from which they were suffering, were tested by the Wassermann reaction. The results showed that out of 550 cases 75, or 13·6 per cent., gave positive or partial reactions. With regard to gonorrhœa, a statement was furnished to the advisory committee by the Women's Hospital, from which it appeared that in the view of the staff at least 50 per cent. of the major operations performed at the hospital were due to gonorrhœa.

The advisory committee, after submitting their report to the Government, endeavoured to induce the press to take up the question, and in this they met with a certain amount of success. The National Council of Women were also approached, and they agreed to assist in an educational campaign and to coöperate with any reasonable measures the Government might bring in, provided that there was no legislation on the lines of the Contagious Diseases Acts, and that no difference was made as between men and women. The advisory committee did not recommend legislation, but they advised the Government to subsidise the provision of wards for the reception of vereneal cases in the general hospitals. This recommendation was adopted by the Government and free beds were provided, 24 for males at the Alfred Hospital and 20 for females at the Women's Hospital. The wards were equipped by the Government with the most modern appliances, and in addition a subsidy was made to the Melbourne University to provide for the carrying out of Wassermann tests. At first there was some difficulty in filling the beds provided, but as it became known that the treatment was in a general ward, and that the patients would not be dealt with differently from those in the other wards, a good demand for beds arose. The establishment of a night clinic at the Alfred Hospital also helped to popularise the arrangements.

Dr. Ham thought that the experiments conducted at Melbourne had led to a greater interest in the subject, and that in securing early treatment and early diagnosis they had achieved an important result.

A Health Bill was at the present time before the Victorian Legislature which contained provisions for adequate and gratuitous treatment of patients, for the prohibition of treatment by unqualified persons, and for making the transmission knowingly of venereal diseases a penal offence.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN the 96 English and Welsh towns with populations exceeding 50,000 persons at the last Census, and whose aggregate population at the middle of this year is estimated at 17,852,766 persons, 7756 births and 4504 deaths were registered during the week ended Saturday, Dec. 6th. The annual rate of mortality in these towns, which had been 13·8, 13·4, and 14·1 per 1000 in the three preceding weeks, declined to 13·2 per 1000 in the week under notice. During the first ten weeks of the current quarter the mean annual death-rate in these towns averaged 13·6 per 1000, and was equal to the rate recorded in London during the same period. Among the several towns the death-rate last week ranged from 4·5 in Wimbledon, 5·3 in Reading, 6·0 in Ilford, 7·0 in Croydon, and 7·5 in Bournemouth, to 18·5 in Newcastle-on-Tyne, 18·7 in Stoke-on-Trent, 18·9 in South Shields, 19·3 in Ipswich, and 21·5 in Burnley.

The 4504 deaths from all causes were 335 fewer than the number in the previous week, and included 269 which were referred to the principal epidemic diseases, against numbers steadily declining from 925 to 348 in the eight preceding weeks. Of these 269 deaths, 101 resulted from infantile diarrhœal diseases, 45 from diphtheria, 40 from measles, 37 from scarlet fever, 32 from whooping-cough, and 14 from enteric fever, but not one from small-pox. The mean annual death-rate from these diseases last week did not exceed 0·8, against 1·1 and 1·0 per 1000 in the two preceding weeks. The deaths of infants (under 2 years of age) attributed to diarrhœa and enteritis, which had been 187, 149, and 152 in the three preceding weeks, declined to 101 last week; of this number 27 were recorded in London, 8 in Birmingham,

7 in Liverpool, 6 in Manchester, 4 in Stoke-on-Trent, and 3 each in Salford, Middlesbrough, and Rhondda. The deaths referred to diphtheria, which had been 63, 76, and 65 in the three preceding weeks, further fell to 45 last week, and included 10 in London, 4 in Portsmouth, 3 each in Southampton, Stoke-on-Trent, and Hull, and 2 each in Gloucester, Birmingham, and Liverpool. The fatal cases of measles, which had been 43, 50, and 39 in the three preceding weeks, were 40 last week; 5 deaths occurred in Sheffield, 5 in Middlesbrough, 4 in Norwich, and 3 each in Stoke-on-Trent, Salford, and Burnley. The deaths attributed to scarlet fever, which had been 36, 32, and 35 in the three preceding weeks, further rose to 37 last week, which was the highest number of deaths from this disease recorded in any week of this year; 5 deaths were registered in Birmingham, 4 in Manchester, 3 each in Preston, South Shields, and Newcastle-on-Tyne, 2 in Liverpool, and 2 in Salford. The deaths referred to whooping-cough, which had been 35, 33, and 39 in the three preceding weeks, fell to 32 last week, and included 6 in London, 3 each in Stoke-on-Trent, Birmingham, and Coventry, 2 in Manchester, and 2 in Leeds. The fatal cases of enteric fever, which had been 16, 21, and 18 in the three preceding weeks, declined to 14 last week, of which 2 occurred in Hull.

The number of scarlet fever patients under treatment in the Metropolitan Asylums and the London Fever Hospitals, which had steadily risen from 2112 to 4112 in the 13 preceding weeks, had further increased to 4143 on Saturday last; 524 new cases were admitted during the week, against 597, 558, and 618 in the three preceding weeks. These hospitals also contained on Saturday last 1193 cases of diphtheria, 167 of whooping-cough, 72 cases of enteric fever, and 52 of measles, but not one of small-pox. The 1102 deaths from all causes in London were 121 fewer than the number in the previous week, and corresponded to an annual death-rate of 12·7 per 1000. The deaths referred to diseases of the respiratory system, which had risen from 205 to 261 in the four preceding weeks, declined to 227 last week, and were 97 below the number recorded in the corresponding week of last year.

Of the 4504 deaths from all causes in the 96 towns, 166 were attributed to different forms of violence, and 416 were the subject of coroners' inquests. The causes of 35, or 0·8 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest. All the causes of death were duly certified in Manchester, Sheffield, Leeds, Bristol, West Ham, Bradford, Hull, Newcastle-on-Tyne, and in 70 other smaller towns. Of the 35 uncertified causes of death, 10 were recorded in Birmingham, 5 in Liverpool, 3 in Stoke-on-Trent, 2 in London, and 2 in Darlington.

HEALTH OF SCOTCH TOWNS.

In the 16 largest Scotch towns with an aggregate population estimated at 2,259,600 persons at the middle of this year, 1050 births and 677 deaths were registered during the week ended Saturday, Dec. 6th. The annual rate of mortality in these towns, which had been 16·2, 15·8, and 17·0 per 1000 in the three preceding weeks, declined to 15·6 per 1000 in the week under notice. During the first ten weeks of the current quarter the mean annual death-rate in these towns averaged 15·0, against 13·6 per 1000 in the 96 large English towns. Among the several Scotch towns the death-rate last week ranged from 6·8 in Hamilton, 7·3 in Falkirk, and 10·7 in Ayr, to 19·2 in Coatbridge, 19·5 in Kilmarnock, and 22·0 in Clydebank.

The 677 deaths from all causes were 60 fewer than the number in the previous week, and included 83 which were referred to the principal epidemic diseases, against 68 and 75 in the two preceding weeks. Of these 83 deaths, 40 resulted from measles, 14 from infantile diarrhœal diseases, 12 from diphtheria, 8 from scarlet fever, 5 from whooping-cough, and 4 from enteric fever, but not one from small-pox. These 83 deaths from the principal epidemic diseases were equal to an annual death-rate of 1·9, against 0·8 per 1000 in the 96 large English towns. The deaths attributed to measles, which had been 36, 33, and 35 in the three preceding weeks, further rose to 40 last week, and included 24 in Glasgow, 5 in Greenock, 3 in Clydebank, and 2 each in Paisley, Leith, and Motherwell. The deaths of infants (under 2 years of age) referred to diarrhœa and enteritis, which had been 21, 14, and 8 in the three preceding weeks, rose to 14 last week, of which 4 were registered in Glasgow, 3 in Dundee, and 3 in Aberdeen. The fatal cases of diphtheria, which had been 10, 10, and 14 in the three preceding weeks, fell to 12 last week, and included 4 in Glasgow and 3 in Aberdeen. The deaths attributed to scarlet fever, which had been 9, 6, and 11 in the three preceding weeks, declined to 8 last week, of which 4 occurred in Edinburgh. The deaths referred to whooping-cough, which had been 3, 5, and 7 in the three preceding weeks, fell to 5 last week, and comprised 4 in Glasgow and 1 in Hamilton. The 4 fatal cases of enteric fever were slightly in excess of the average in the earlier weeks of the quarter, but showed no marked excess in any particular town.

The deaths referred to diseases of the respiratory system, which had increased from 84 to 129 in the four preceding weeks, declined to 123 in the week under notice; 23 deaths resulted from various forms of violence, against 30 and 26 in the two preceding weeks.

HEALTH OF IRISH TOWNS.

In the 27 town districts of Ireland with an aggregate population estimated at 1,199,180 persons at the middle of this year, 490 births and 367 deaths were registered during the week ended Saturday, Dec. 6th. The annual rate of mortality in these towns, which had been 18·8, 16·4, and 16·6 per 1000 in the three preceding weeks, fell to 16·0 per 1000 in the week under notice. During the first ten weeks of the current quarter the mean annual death-rate in these Irish towns averaged 17·2 per 1000; in the 96 large English towns the corresponding rate did not exceed 13·6, while in the 16 Scotch towns it was equal to 15·0 per 1000. The annual death-rate last week was equal to 18·1 in Dublin (against 12·7 in London and 16·6 in Glasgow), 15·4 in Belfast, 16·3 in Cork, 17·8 in Londonderry, 14·9 in Limerick, and 11·4 in Waterford, while in the 21 remaining smaller towns the mean death-rate did not exceed 13·3 per 1000.

The 367 deaths from all causes were 15 fewer than the number in the previous week, and included 36 which were referred to the principal epidemic diseases, against numbers declining from 41 to 30 in the three preceding weeks. Of these 36 deaths, 13 resulted from scarlet fever, 13 from infantile diarrhœal diseases, 4 from whooping-cough, 3 from enteric fever, 2 from diphtheria, and 1 from measles, but not one from small-pox. The mean annual death-rate from these diseases last week was equal to 1·6 per 1000; in the 96 large English towns the corresponding rate did not exceed 0·8, while in the 16 Scotch towns it reached 1·9 per 1000. The deaths attributed to scarlet fever, which had been 9, 6, and 11 in the three preceding weeks, further rose to 13 last week, and included 8 in Belfast and 3 in Dublin. The deaths of infants (under 2 years of age) referred to diarrhœa and enteritis, which had been 15, 18, and 12 in the three preceding weeks, were 13 last week; of this number 5 were recorded in Dublin, 2 in Cork, 2 in Londonderry, and 2 in Tralee. The 4 fatal cases of whooping-cough, comprising 3 in Belfast and 1 in Dublin, were equal to the average in the earlier weeks of the quarter. Of the 3 deaths attributed to enteric fever, 2 occurred in Dublin and 1 in Belfast; the 2 deaths from diphtheria were recorded in Dublin and Kilkenny respectively, and the fatal case of measles in Dublin.

The deaths referred to diseases of the respiratory system, which had been 73, 68, and 76 in the three preceding weeks, fell to 73 in the week under notice. Of the 367 deaths from all causes, 112, or 31 per cent., occurred in public institutions, and 7 resulted from various forms of violence. The causes of 14, or 3·8 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest; in the 96 large English towns the proportion of uncertified causes did not exceed 0·8 per cent.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments have been notified:—Fleet-Surgeon: W. H. Pope to the *Essex*, on commissioning. Staff-Surgeons: E. R. L. Thomas to be lent to the *Cressy*, temporarily; H. Cooper to the *Diana*, and for duty with group of 3rd Fleet Ships, additional; and A. O. Hooper to the *Pembroke*, additional, for disposal, and to the *Natal*. Surgeons: L. H. Richardson to the *Sirius*, on commissioning, and to the *Odin*, on recommissioning; and E. St. G. S. Goodwin to the *Hampshire*, on recommissioning.

The undermentioned Staff-Surgeons have been promoted to the rank of Fleet-Surgeon in His Majesty's Fleet:—Malcolm Cameron, James Duff Scott Milln, Kenneth Hurlstone Jones, Samuel Henry Facey, Godfrey Taylor, Alfred Woollcombe, Francis Bolster, George Ernest Macleod, William Henry Pope, and James Herbert Fergusson.

ARMY MEDICAL SERVICE.

Colonel Harry S. McGill is placed temporarily on the half-pay list on account of ill-health (dated Dec. 4th, 1913). Colonel Walter G. A. Bedford, C.M.G., from the half-pay list, is restored to the establishment, vice H. S. McGill, to the half-pay list (dated Dec. 4th, 1913).

ROYAL ARMY MEDICAL CORPS.

Major James E. Carter is placed on retired pay (dated Dec. 2nd, 1913).

Colonel H. N. Thompson, D.S.O., senior medical officer at Lucknow Cantonment, has been selected for appointment as Deputy Director of Medical Services to the Scottish Command, vice Colonel T. P. Woodhouse. Colonel H. J. Barrett has taken up duty as Assistant Director of Medical Services

to the Bareilly, Garhwal, and Dera Dun Brigades of the Meerut Division.

Lieutenant-Colonel J. M. F. Shine has left Ireland for a tour of service in India. Lieutenant-Colonel O. R. A. Julian, C.M.G., has taken over medical charge of the Royal Hospital at Chelsea. Lieutenant-Colonel C. W. H. Whitestone has been appointed Senior Medical Officer on board the transport s.s. *Dongola* leaving Karachi on Dec. 19th for Southampton. Lieutenant-Colonel R. Caldwell has been appointed for Medical Recruiting Duties at Portsmouth. Lieutenant-Colonel J. H. Daly has taken over charge of the Military Hospital at Belfast. Lieutenant-Colonel A. A. Sutton, D.S.O., has taken up duty as Commandant at the Royal Army Medical Corps School of Instruction at Aldershot.

Major M. H. Babington has joined at Malta. Major W. A. Ward has taken up duty at the Military Hospital, Bulford Camp, Salisbury Plain. Major E. E. Powell has left Aldershot for a tour of service in India. Major W. P. Gwynn has arrived home for duty from Shwebo. Major H. M. Morton has been transferred from the Military Hospital at Glasgow to Perth. Major T. C. Mackenzie, D.S.O., has been transferred from the Military Hospital at Dover to York. Major F. E. Gunter and Major J. H. Barbour have been detailed for duty on board the transport s.s. *Rohilla*, which left Karachi for Southampton on Nov. 19th. Major C. H. Furnivall has been appointed in medical charge of the Civil Jail at Karachi Cantonment. Major W. A. S. J. Graham has been appointed to hold charge of the Military Hospital at Neemuch Cantonment and medical charge of the Political Agency. Major A. W. A. Irwin has been transferred from Cork to Clonmel. Major A. W. Sampey, specialist in the prevention of disease to the Fyzabad Brigade, has taken up duty at the Military Hospital, Wellington. Major C. H. Carr has been transferred from the Military Hospital at Tidworth to Upavon.

Captain J. C. G. Carmichael, on arrival home from Khanspur Cantonment, Murree Hills District, has been appointed to the Military Hospital at Manchester. Captain F. M. M. Ommanney has been transferred from Armagh to the Military Hospital at Belfast. Captain H. Harding has taken up duty at Warley Barracks on transfer from the Military Hospital at Colchester. Captain W. J. Tobin has been granted six months' leave of absence home from India. Captain W. F. H. Vaughan will on arrival in India be appointed to the Lahore Division for duty. Captain W. Mitchell has been appointed in medical charge of troops on board the transport s.s. *Dongola* leaving Karachi for Southampton on Dec. 19th. Captain R. E. Humfrey has been transferred from Kilworth to the Military Hospital at Queenstown. Captain A. S. Heale has taken up duty at Liverpool. Captain J. A. Anderson has been appointed to the Royal Army Medical College, Grosvenor-road. Captain H. Gibson has been appointed to hold charge of the Cantonment General Hospital at Kamptee. Captain R. Gale has taken up duty in the Public Health Department in Egypt. Captain P. Dwyer has been selected for appointment as Specialist in Otology to the Dublin District. Captain M. Keane has joined for a tour of duty at the Military Hospital, Tidworth, Salisbury Plain District. Captain B. Johnson has been transferred from the Military Hospital at Cork to Limerick. Captain A. C. H. Gray has been selected for appointment as Specialist in Bacteriology and Clinical Pathology at King George V. Military Hospital at Arbor Hill, Dublin. Captain J. Mackenzie has left Pirbright for a tour of service with the Northern Army in India, and on arrival will be appointed to the Lucknow Division. Captain N. E. J. Harding has joined the London District. Captain W. G. Maydon has been appointed Adjutant to the Royal Army Medical Corps School of Instruction in the West Lancashire Division. Captain R. E. Humphrey has been placed under orders for a tour of service with the Secunderabad Division of the Southern Army in India. The following Captains have joined the Royal Army Medical College for the courses of instruction for promotion to the rank of Major: C. G. Browne (from Netley), G. H. Rees (Londonderry), E. G. Anthoniaz (Belfast), T. B. Moriarty (Aldershot), W. J. Weston (Queenstown), A. E. F. Hastings (Chatham), and R. S. Smyth (Cosham). Captain D. H. C. MacArthur has been transferred from Dalhousie Cantonment to the Military Hospital at Lahore.

INDIAN MEDICAL SERVICE.

The King has approved of the retirement of Lieutenant-Colonel W. H. Gray (dated Oct. 24th, 1913) and of the transfer of Captain R. L. Gamlen and Lieutenant Vincent P. Norman to the temporary half-pay list.

Lieutenant-Colonel C. Donovan has been selected for the advanced rate of pay under Article 7 of the Royal Warrant for Pay and Promotion in succession to Lieutenant-Colonel R. Robertson, advanced to the rank of Colonel. Lieutenant-Colonel S. H. Burnett has been appointed to officiate as Presidency Surgeon of the Second District in Bombay and in medical charge of the Common Prison. The services of Lieutenant-Colonel T. E. Dyson, Deputy Sanitary Commissioner in the Presidency of Bombay, have been placed at the disposal of the Commander-in-Chief in India. Lieutenant-Colonel E. R. Parry has taken up duty as Superintendent of the Central Jail at Midnapore and Officiating Civil Surgeon of the Midnapore District. Lieutenant-Colonel W. H. E. Woodwright has been appointed to officiate as Medical Officer of the Bareilly Central Jail in succession to Captain A. W. Howlett.

Major A. F. W. King has been appointed to officiate as Health Officer of the Port of Aden, and to hold medical charge of the European General Hospital there *pro tem.* Major J. W. Cornwall has been appointed Director of the King Institute at Guidy.

The services of Captain J. V. Macdonald have been replaced at the disposal of the Commander-in-Chief in India. Captain J. M. A. MacMillan has been appointed Civil Surgeon at Hoshangabad. Captain H. P. Cook has been placed at the disposal of the Civil Medical Department of the United Provinces of Agra and Oudh for employment on plague prevention duty. Captain R. H. Bott has been appointed to officiate as Professor of Surgery at the Government Medical College, Lahore, during the absence on leave of Lieutenant-Colonel E. V. Hugo. Captain M. J. Quirke has been placed permanently at the disposal of the Government of the Madras Presidency for employment in the Sanitary Department. Captain H. R. Dutton has been granted privilege leave of absence home from India combined with furlough for one year. Captain N. S. Sodhi has been appointed Plague Medical Officer at Ludhiana. Captain S. H. Lee Abbott has been selected for appointment as Civil Surgeon at Ferozepore. Captain H. M. H. Melhuish has been granted six months' general leave of absence home from India. Captain J. F. Boyd has been placed at the disposal of the Government of the United Provinces of Agra and Oudh as Superintendent of the Central Jail at Bareilly. Captain H. C. Keates has been selected for appointment as Civil Surgeon at Campbellpore. Captain J. L. Lunham has been granted nine months' extension of leave of absence home from India.

SPECIAL RESERVE OF OFFICERS.

Royal Army Medical Corps.

Lieutenant John R. R. Trist to be Captain (dated Nov. 30th, 1913).

The undermentioned Lieutenants are confirmed in their rank:—Gerald F. P. Gibbons and Robert Montgomery.

TERRITORIAL FORCE.

Royal Army Medical Corps.

Surgeon-General Sir Alfred Keogh, K.C.B., retired pay, is appointed to the Honorary Colonelcy of the Royal Army Medical Corps of the 2nd London Territorial Division, vice Lieutenant-Colonel and Honorary Colonel Francis L. Stephenson, C.B., Retired List (Volunteers), who vacates that appointment (dated Dec. 3rd, 1913).

North Midland Mounted Brigade Field Ambulance, Royal Army Medical Corps: Lieutenant-Colonel Thomas Thompson resigns his commission, and is granted permission to retain his rank and to wear the prescribed uniform (dated Dec. 3rd, 1913).

1st East Lancashire Field Ambulance, Royal Army Medical Corps: Lieutenant Joseph M. Postlethwaite to be Captain (dated August 2nd, 1913).

2nd East Lancashire Field Ambulance, Royal Army Medical Corps: The undermentioned Lieutenants to be Captains:—Charles H. S. Redmond (dated Nov. 1st, 1913), Andrew W. B. Loudon (dated Nov. 10th, 1913).

2nd Northumbrian Field Ambulance, Royal Army Medical Corps: Alexander Carson Clarke Lawrence to be Lieutenant (dated Sept. 8th, 1913). William Mackenzie Wilson to be Lieutenant (dated Sept. 27th, 1913).

Highland Divisional Clearing Hospital, Royal Army Medical Corps: Lieutenant-Colonel Francis Kelly, from the 1st Highland Field Ambulance, Royal Army Medical Corps, to be Lieutenant-Colonel (dated Nov. 1st, 1913). Captain David Rorie, from the 1st Highland Field Ambulance, Royal Army Medical Corps, to be Captain (dated Nov. 1st, 1913).

Lowland Divisional Clearing Hospital, Royal Army Medical Corps: Major Peter Fleming Shaw, from the 2nd Lowland Field Ambulance, Royal Army Medical Corps, to be Lieutenant-Colonel (dated Nov. 1st, 1913). Lieutenant Geoffrey Balmanno Fleming, from the 1st Lowland Field Ambulance, Royal Army Medical Corps, to be Lieutenant (dated Nov. 1st, 1913). Acting Sergeant-Major James Law, from the 3rd Scottish General Hospital, Royal Army Medical Corps, to be Quartermaster, with the honorary rank of Lieutenant (dated Dec. 3rd, 1913).

Attached to Units other than Medical Units.—Lieutenant Charles P. Woodstock to be Captain (dated July 1st, 1913). Lieutenant William Gilchrist resigns his commission (dated Dec. 3rd, 1913).

For Attachment to Units other than Medical Units.—William Rex Collingridge to be Lieutenant (dated Dec. 3rd, 1913).

COLONIAL MEDICAL SERVICES.

West African Medical Staff.—Mr. K. McGahey, Medical Officer, Northern Nigeria, has been appointed Senior Sanitary

Officer in Ceylon. Dr. P. H. MacDonald, Dr. R. C. Hiscock, and Dr. M. W. Manuk have retired on pension. Dr. J. D. Finlay has retired with a gratuity. The following have been selected for appointment to the staff: Dr. W. E. Glover (Southern Nigeria), Dr. H. H. Stewart (Southern Nigeria), Mr. W. E. S. Digby (Northern Nigeria), Dr. J. W. B. Hanington (Northern Nigeria), Dr. C. R. Patton (Gold Coast), Mr. H. McC. Hanschell (Gold Coast), and Mr. R. H. Miller (Gambia).

Other Colonies and Protectorates.—Dr. R. F. Russell has been selected for appointment as a Supernumerary Medical Officer, Jamaica. Dr. W. Tudhope, Dr. H. H. V. Welch, and Mr. F. Collar have been selected for appointment as Temporary Medical Officers, East African Protectorate. Dr. H. W. Catto has been selected for appointment as an Assistant Bacteriologist and Pathologist in the Medical Department of Jamaica.

DEATHS IN THE SERVICES.

Deputy Inspector-General Theodore Julian Preston, R.N., at his residence, St. John's Park, Blackheath, aged 66, on Dec. 2nd. He entered the service in 1873, was promoted to the rank of staff-surgeon in 1885, and to fleet-surgeon in 1894. He was present at the bombardment of Alexandria in 1882, and afterwards landed in medical charge of the Royal Marines and was employed on shore as senior medical officer of the Royal Marine Battalion. With Sir Evelyn Wood's Brigade for the defence of Alexandria he was present at the capitulation and surrender of the Aboukir and Rosetta Forts (Egyptian medal, Alexandria clasp, and the Khedive's bronze star). In 1888 he was awarded the Sir Gilbert Blane gold medal. He retired in 1902.

THE GRAND PRIORY OF THE ORDER OF THE HOSPITAL OF ST. JOHN OF JERUSALEM IN ENGLAND.

The King has sanctioned the following promotions in and appointments to the Order of the Hospital of St. John of Jerusalem of England:—To be Knights of Grace: Lieutenant-Colonel Sir James Reid Roberts, I.M.S., the Honourable Colonel Robert Neil Campbell, C.B., C.I.E., I.M.S., Dr. Cluny Macpherson, Colonel William Henry Bull, K.H.S., A.M.S. (T.F.) (from Honorary Associate), and Mr. Harry Littlewood (from Honorary Associate).

INDIAN MEDICAL SERVICE EXAMINATION.

An examination for not less than 12 commissions in His Majesty's Indian Medical Service will be held in London on Monday, Jan. 26th, 1914, and the five following days. Application for forms should be made to the Military Secretary, India Office, London, S.W.

Obituary.

PERCY KINGSLEY STEELE, M.B., B.CH. VICT., F.R.C.S. ENG.,

HONORARY SURGEON TO THE ROYAL HALIFAX INFIRMARY; LIEUTENANT, R.A.M.C. (T.).

THE profession in the West Riding of Yorkshire has sustained a severe loss by the death of Dr. Percy Kingsley Steele, of Halifax, after three weeks' illness, at the early age of 32. He was the second son of Mr. Samuel H. Steele, of Halifax, and after a successful career at the University of Leeds, during which he gained many distinctions and prizes, he obtained in 1903 the degrees of M.B., B.Ch. Vict. with honours. He then became house surgeon, house physician, and later resident medical officer to the Leeds General Infirmary, after which he worked in London, and in 1906 obtained the Fellowship of the Royal College of Surgeons of England. Many of his friends had expected him to return to Leeds, but he joined his father at Halifax, and on the retirement of the latter he succeeded to the whole practice. Soon after he settled down a vacancy occurred on the staff of the Royal Halifax Infirmary, and he was elected to the vacant post in 1907. His previous career in Leeds stood him in good stead, and being able, hard-working, and deeply devoted to his profession, he soon had a brilliant career before him. This was made the more certain because of the varied direction of his energies. He became secretary to the Halifax and Local District Medical Society, which prospered under his care for some years. He was a lieutenant in the R.A.M.C.(T.). On the acceptance of the working of the Insurance Act by the profession in December, 1912, he was unanimously appointed to the post of secretary to the Local Medical Committee at the meeting of the Halifax Division of the British Medical Association, and although he did not approve of the method of the introduction of the Act he accepted the responsibility and did his best on behalf of his medical brethren. That he gained the respect and esteem of the Insurance Committee is shown by the fact that at a meeting of this body on Dec. 5th a resolution was passed recording their appreciation of "the invaluable services most cheerfully rendered by the late Dr. Percy K. Steele, whose sudden and untimely death has created a most acute loss."

The view of the Local Insurance Committee is that of the community at large. Dr. Percy Steele's untimely death is a real loss to the medical profession and town of Halifax, and we associate ourselves with the sympathies which have been so widely extended to his father, Mr. Samuel Steele.

RICHARD MACARTNEY, L.R.C.P. & S. EDIN.,

CORONER FOR THE FOREST OF DEAN DIVISION OF GLOUCESTERSHIRE.

Mr. Richard Macartney died at his residence, "Lissanoure," Cinderford, on Dec. 6th, after a few days' illness, from pneumonia.

Richard Macartney was born on Dec. 14th, 1861. He was son of Mr. William Macartney, Chief of the Police Force for the island of Ceylon. After studying at Queen's College, Belfast, and the Carmichael School, Dublin, he took the L.R.C.P., L.R.C.S., and L.M. qualifications of Edinburgh in 1883, and shortly afterwards commenced practice in Cinderford. He held several public appointments, being medical officer and public vaccinator for the No. 4 district of the Westbury-on-Severn Union. He was also surgeon to several collieries. Mr. Macartney took a great interest in ambulance work, and was a lecturer and examiner of the St. John Ambulance Association; he was also a prominent Freemason. He was a good sportsman, and was closely associated with county and local football. In 1907 he was appointed coroner for the Forest of Dean division of Gloucestershire, and was then presented with a motor-car as a mark of respect and esteem. Mr. Macartney was extremely popular in Cinderford and the district.

HUBERT LISTON WILLCOX, L.R.C.P. LOND., M.R.C.S. ENG.,

HONORARY SURGEON TO THE WARMINSTER HOSPITAL.

THE death of Mr. Hubert L. Willcox, of Warminster, which occurred on Dec. 3rd, was attended with singularly sad circumstances. On Nov. 5th he scratched his finger slightly whilst performing an operation, and subsequently blood poisoning supervened which terminated fatally. Mr. Willcox received his medical education at King's College Hospital, London, and took the L.R.C.P. and M.R.C.S. qualifications in 1901. After holding the appointment of house surgeon at King's College Hospital he joined his father, Mr. R. Lewis Willcox, in practice at Warminster. The deceased, who was only 36 years of age at the time of his death, was extremely popular in Warminster and the district, and much sympathy is felt there for the members of his family.

MEDICAL PRACTICE UNDER THE INSURANCE ACT.

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 1654.*)

XXX.—SOUTH WALES AND MONMOUTHSHIRE.

THE position in South Wales and Monmouthshire differs considerably from that prevailing in other industrial districts, and even from that observed in coal areas in other localities. For a long time the system known as "poundage" prevailed here, and this, which is presently to be explained, rendered the need of an Insurance Act much less urgent than in other parts of the country. One of the greatest advantages conferred on the community at large by the Act has been the insurance against sickness by many poor persons who were not insured before, this remark applying of course to both sexes, but women were especially unprotected in this direction. But in Wales insurance existed very largely before the new legislation, and some persons think that its form was as satisfactory as to-day under the Act. The colliers, the metal workers, and many other classes of working men took advantage of the poundage system, by which their employers deducted so many pence from each pound of wages earned, to be devoted to purposes generally beneficial to the men. In this manner the colliers of Ferndale purchased freehold land and built a fine hall, with theatre, assembly rooms, a library, a swimming bath, and a billiard saloon. The institution cost £17,800, and the cost was covered by a "poundage" of 1½*d.* Eleven such halls have been built in the two Rhondda valleys, the cheapest costing £2000. For medical aid purposes the colliers consented to a poundage of 3*d.* for themselves and their families.

Wages, of course, differ greatly, and where coal is easily got £2 a week may be the average. But to be on the safe side the local practitioners have set down the average at a little more than 30*s.* a week, and thus reckon the "poundage" of 3*d.* as equal to 21*s.* a year. Though this sum included attendance on the families, it was paid equally by bachelors and by men who had no children. Therefore to-day the insured collier or metal worker, whether married or single, should pay about 14*s.* a year over and above the 7*s.* collected under the Insurance Act, otherwise the medical profession cannot receive as much as formerly. The logical outcome of these figures would be that the poundage system should be continued as before; but as the insured person contributes under the Act 7*s.*, or a third of the amount formerly collected, the levy should be reduced from 3*d.* to 2*d.* in the £. This was actually agreed upon at some of the works and collieries where matters were settled very soon after the first Act was passed. But after a while the childless workers began to object to paying about 14*s.* a year for other men's wives and families. The doctors, on their side, urged that even with these contributions they would not be better paid, as they would have much more clerical work, even if the clinical work was made lighter in some important directions.

The Working of the Poundage System.

Under the poundage system the medical attendant was elected at a mass meeting held by those who paid the levy. Vacancies were filled up by electing a practitioner living in the district who was popular enough to secure a majority vote, the retiring doctor's assistant being very generally chosen. The works doctor thus appointed shared in the fortunes of the men. During a strike he was not paid at all. If the strike resulted in an increase of wages then the doctor's income rose in due proportion, and if the wages fell the doctor also received less. Thus the payment for medical service was always in proportion to the wages actually earned. The practitioners received a life appointment subject to a mass meeting of the men. The deduction of the 3*d.* in the £ at the office where the wages are paid was permissible under the Truck Act. The collier had to sign a book setting forth, as a condition of his employment, certain deductions to be made from his wages for coal, rent, medical attendance, and other things. The works doctor had to provide medical attendance, drugs, and appliances. This included splints, trusses, dressings, bandages, and cod-liver oil. He was called upon to do major operations, amputations, relief of strangulated hernia, and also all emergency surgery. He had to provide suitable surgeries. His gross income might amount to £1000, in some case perhaps even to £2000, but it is difficult to get precise figures, and there were many heavy attendant expenses. It will be seen also that under the poundage system the works doctor had more to do than the panel doctor. Therefore to-day it is put forward that if the insured person, over and above his insurance contribution, pays a poundage for his dependents he could claim from his medical attendant under the poundage system services which he would not receive from him as a panel doctor. This is the one advantage the childless worker would have if he continued paying poundage as well as his contribution under the Act. In South Wales and Monmouthshire the family is estimated at between four to five persons, or about 4*s.* a year for each person. Now 7*s.* are paid for one member of the family, and the trouble is to settle definitely what the other members of the family are to pay.

The Working-class Masters.

Instead, however, of endeavouring to settle this difficulty by mutual agreement a considerable number of energetic and ambitious working men have seen in these circumstances an opportunity of founding institutions in which they could obtain posts and play a leading part. The motives, with perhaps an exception here and there, are not sordid. But the man who has so far raised himself from the ranks of the working-class as to become a leader desires to possess power as naturally as other classes of the community. Thus the question of institutes came forward prominently. Under the Insurance Act the workman pays, but he does not patronise. Therefore there is a strong temptation to escape from the Act and to re-establish committees of management that shall exercise authority and be able to give or withhold employment.

Before the Act came into force there were medical aid institutions which the profession did not like; but as they were given a legal standing by Section 15, Clause 4, of the Act it was thought futile to attempt to protest against their continuance. Among the most important of the institutions that provided medical attendance before the Act are those at Tredegar, Rhymney, Blaenavon, and Ebbw Vale. Here the doctors are appointed by the miners on the whole-time

system and paid a regular salary. The profession has objected that the money deducted from the miners' wages for medical treatment is not all paid over to the doctor, and that their medical officer is under the complete control of a committee of workmen. It is a fact that the medical officer is absolutely dependent for his livelihood on these committees. There is no question of the patient's preferences: it is the committee alone which decides. Then though whole-time service was imposed, the idea that their medical servant might, at some time in life, be entitled to a pension never occurred to these institutions. The medical servants of such organisations have but one way of getting an amended position, and that is an effective strike.

Medical Service under an Institution.

When the Act came into force some leading spirits among the men began to search for means to increase the number of the institutions like those that had been in operation before, as a way to secure cheap medical attendance for the dependents of insured persons. They endeavoured to persuade themselves that medical men would serve working men better if working men representatives had a position from which to threaten. Further, there was the question of the certificates for sick benefits and for obtaining payments under the Workmen's Compensation and Employers' Liability Acts. Here it may well be asked if a medical man, under such conditions of employment, is as free as he should be in the giving of certificates. Would he not be more free as a panel doctor? If he refused a certificate when on the panel he might lose a patient; if he displeased the managing committee of an institute he might lose his means of existence.

The institutes boast on their side that they have hospitals. To this it may be retorted that the object of these hospitals is not medical science but cheapness; and that these hospitals are not properly controlled and have no competent authority over them. A committee of workmen ask an architect for a plan of a hospital, though they are not aware if the architect has special knowledge of the subject. The architect supplies a plan on information from the committee, and it is inevitable that the plan will follow more the limitations laid down by the committee than any idea of what will best suit the forthcoming patients. The committee would probably take the advice of their whole-time medical officer, but he might frequently have no experience beyond that acquired as a house surgeon or house physician. Good practical buildings have followed such plans, but there is no certainty.

The Creation of New Institutions after the Act.

It will be seen, therefore, that the institutions that exist to-day in virtue of Section 15, Clause 4, do not bear such a character as to render the increase of their number at all desirable. Nevertheless, the Welsh Insurance Commissioners have permitted a great increasing of their number in defiance of the implied purpose of the law, which in the section alluded to says that institutions that existed "at the time of the passing of the Act" may continue to exist, implying thus that such institutions are not to be created after the passing of the Act. Over and over again it was stated that the panel system was to be the proper and normal arrangement. But now Clause 3 of Section 15 has been so twisted as to defeat the purport of Clause 4. This is the contracting-out clause. It was felt that, for instance, it was hard to compel patients to abandon their family doctor because the latter refused to go on the panel. All the speeches in Hansard show that the object was to allow patients to make their own and special arrangements with medical men who were not on the panel. But the Insurance Committees have been much opposed to such a practice, and only on rare occasions have they consented to allow this contracting out. Now the extraordinary thing is that what has been so strenuously and harshly refused to the individual, though positively sanctioned by the law, has been recklessly granted to societies or associations.

The Statutory Rules and Orders, 1912, No. 1719, say on page 7, paragraph 7, that the Insurance Committees may allow any insured persons resident in the county or borough, whether individually or collectively, in lieu of receiving medical benefit under the arrangements made by the Insurance Committee, to make their own arrangements for receiving treatment, including medicines and appliances. This surely is stretching the Act of Parliament. In the Act it says and "to allow any other persons." Is the fact that there is an "s" after the word person sufficient to sanction collective action? Can a collectivity be allowed to do what is but rarely permitted to the individual—namely, contract out of the Act? A committee of workmen form a scheme; they persuade a number of insured people to join the scheme and to give over their pink cards to the committee. The workmen's committee then proceed to the Insurance Committee, show the pink cards, and ask to make their own arrangements collectively. The Welsh Insurance Commissioners advised the Insurance Committees to permit these collective arrangements under Section 15, Clause 3, of the Act. They have since, it is true, repudiated their own action, but the record stands in the minutes of the Monmouthshire Insurance Committee. On Jan. 6th, 1913, the Major Committee gave the report of the conference just held at Cardiff with the Welsh Insurance Commissioners, and, speaking of the Commissioners, said: "It is their opinion that Section 15 (3) of the Act should be generously construed and any collective arrangements among the men should be encouraged."

The Swansea Hospital Staff Saves the Situation.

In consequence of this attitude of the Welsh Commissioners no less than seven schemes for seven different institutes or institutions (for they receive either name indiscriminately), to be created after the passing of the Act, have been sanctioned by one single committee—the Glamorganshire Insurance Committee. When efforts were made to persuade medical practitioners to go on the panel they were promised that all the money subscribed would go to the medical profession, but now a large proportion is to be spent on these new schemes. For the old schemes under Section 15 (4) the Commissioners and the Local Insurance Committee can ask that the institutes shall give in their accounts. There is some show of control. But under Section 15 (3) the institutes escape from any sort of supervision; their existence is looked upon as a private matter. Such contradictions, many practitioners argue, are absolutely illegal. Why should old institutions be controlled and new institutions escape any such control?

Fortunately, the movement has received a check, and the whole profession benfits by an example that may show the way out of the trouble. It was

proposed to organise a system—that is, a medical aid institution under Section 15 (3) at Swansea. The general practitioners and the panel doctors, however, found a new and powerful ally in the staff of the general hospital. The latter simply refused, except in urgency cases, to have anything to do with the members of any such contracting-out systems. The workmen on the managing committee of the hospital protested, and the mayor called a meeting of the representatives of Approved Societies, Friendly Societies, Trades Unions, and the medical profession. A compromise was then effected. The question was not simple. Institutions that already existed in the country around Swansea, occasionally sent their patients to the Swansea Hospital; and the new institute it was proposed to create within the town of Swansea desired to do the same. The representatives of the workmen agreed to give up the Swansea scheme and to use their influence to dissolve those schemes that existed outside Swansea, if the hospital staff would continue to receive the patients who came from the existing institutions. This proposal was accepted, but the duration of the agreement was limited to the end of the year. The conditions have been loyally observed, only the representations made by the workmen of Swansea were badly received at the institutions of, for instance, Neath and Briton Ferry, and the Swansea delegates were told to mind their own business.

A Definite and Promising Policy.

A great issue is now before the country. The hospital staff at Swansea has said that if workmen mean to supplant the Act by establishing systems of their own they must also establish hospitals of their own, for the hospital staff would have nothing to do with the medical officers or the patients of these new-born systems. If the hospitals all over the country consent to adopt a similar policy they would be absolute masters of the situation. If the staff of one single hospital goes on strike it might possibly be replaced by a paid staff; but if the Newport and Cardiff hospitals, as now proposed, also fall into line with the Swansea Hospital it would be quite impossible to replace the staff of these, the three nearest and largest hospitals. A strike at a hospital is much easier to manage than a strike of general practitioners. Such a strike would be a very bad business for the patients, but quite good business for the physicians and surgeons on strike. The latter would get good fees for doing, under bad conditions at the patients' homes, what they had been doing for nothing under good conditions at the hospital. The British Medical Association have recommended approaching the staffs of all the hospitals throughout the country and urging them to give active support in preventing the extension of institutes and in combating those that already exist by not only refusing to recognise their medical officers but also by refusing to treat their patients. If hospital support was cut away from these contracting-out bodies they would be obliged to surrender.

Here, for once, we have a clearly defined policy with the certainty of success if sufficient discipline and unanimity is shown. A gross abuse is being introduced under Section 15, Clause 3. Dr. C. Addison, M.P., the author of this clause, went to Cardiff and held a conference, and it was then freely admitted that the clause was never intended to favour the creation of the new institutions which the next clause (4) expressly forbids. The object is to favour individuals contracting out of the Act, and not collectivities formed into associations, institutes, systems, or institutions. Much now depends on the attitude of the hospitals, and the general support they receive from the profession.

(To be continued.)

Home and Foreign Notes.

(FROM OUR OWN CORRESPONDENTS.)

MANCHESTER.

New Association for Asylum Medical Officers for the North of England.

A MEETING of assistant medical officers of asylums in the north of England was held in Manchester recently. The meeting was convened by the Midland Association of Assistant Medical Officers for the discussion of the disabilities of asylum assistant medical officers. Dr. F. J. Stuart stated that promotion had nothing whatever to do with merit or energy, but was wholly a question of good fortune, depending chiefly on the promotion of their superiors. Moreover, the pay was unsatisfactory. Many senior assistant medical officers, after many years' asylum experience, were receiving less than was paid by the Lancashire County Asylum Board with no hospital experience at all. There was another disability—in some cases these officers, even after from 10 to 15 years' service, were not allowed to marry. After discussion it was resolved to form an association of medical officers of public asylums for the north of England. Representatives were elected to arrange terms of amalgamation with other associations of the same kind that have been or are being formed in other parts of the country. Dr. Stuart was appointed secretary to the new association.

Lancashire's Work for the Feeble-minded.

From the annual report of the Lancashire and Cheshire Society for the Permanent Care of the Feeble-minded I learn that during the year at Sandlebridge the number of boys and girls over 16 years of age is increasing. Now there are 55 boys and 44 girls over school age. In the colony there are 106 boys and 52 men, and 45 women and 66 girls.

David Lewis Trust and Distribution of £377,000.

The David Lewis Trust has now been closed. Sir William Mather at the last annual meeting, which was held in Manchester, gave an account of its work. Formed by the legatees of the late David Lewis in 1883, the testator left a fund to be administered for the benefit of the deserving poor of Manchester and Liverpool. During the 20 years the trust has been in operation £377,000 have been distributed. Sir William Mather stated that the schemes which had been supported were: In Manchester, the Blackley Recreation Ground, £21,211; Ardwick Playground, £9554; Salford Recreation Ground, £21,134; donations to sundry charities, £4650; the David Lewis Epileptic Colony, £118,661; making a total for Manchester of £175,210. Liverpool had received £192,622, devoted to the following objects: Northern Hospital, £107,944; Nursing Association, £11,041; hostel and club, £73,637. In addition to these amounts a distribution has been made since the liquidation of the trust exceeding £10,000. The whole of the expenditure has been made on the strictest business lines.

Dec. 8th.

WALES AND WESTERN COUNTIES.

Swansea Housing Scheme.

THE Swansea health committee has decided to carry out a housing scheme on a site of 35 acres owned by the corporation. Altogether 500 houses are to be erected, or about 15 to the acre. In 200 houses there will be two bedrooms and in the remainder three bedrooms. The cost of the former is estimated at £172 each and of the latter at £220. The rental is to be 6*s.* and 7*s.* 6*d.* per week respectively. A few of the larger houses will have shop accommodation on the ground floor, and these, it is estimated, will cost £268 each and will be let at 11*s.* weekly. In order to keep down the cost of the smaller houses the bedrooms only just comply with the minimum of 72 feet of floor space required by the local by-laws. The medical officer of health, Dr. T. Evans, has urged that they should be increased in size, even though the additional cost of erection necessitates a subsidy from the rates. He contended that housing should be regarded in the same light as the construction of waterworks or sewers or other provisions for the prevention of disease.

Newport Schools for Mothers.

The fifth annual report of the Newport (Mon.) Schools for Mothers is a record of continued useful work. There are now three of these schools in different parts of the town, where instruction is given to women in the feeding and general bringing up of children, the making of garments, &c. Milk is supplied to necessitous mothers who nurse their children, so that an encouragement is given to breast-feeding. It is of interest to note that the medical officer of health, Dr. J. Howard-Jones, in his annual report for 1912, stated that inquiries were made during the year with respect to 2073 births, and it was found that no fewer than 87 per cent. were wholly breast-fed, and only 8 per cent. were entirely artificially fed. Inquiries made at the end of six months with respect to 302 children showed that 72 per cent. were still breast-fed. The death-rate among the infants brought to the schools was 49 per 1000 compared with 117 in the whole borough and with 57 per 1000 in one of the wards and 164 in another. Since October last a visiting medical officer has been engaged in attending once in six weeks at each of the three schools. It is no part of his duty to treat the children, but he advises when treatment by the family doctor is desirable.

Decrease in Vaccination in Bristol.

During the 12 months ended Sept. 30th 1618 primary vaccinations and 51 revaccinations were performed by the public vaccinator of Bristol compared with 1974 primary vaccinations and 266 revaccinations in the preceding year.

The Royal Albert Hospital, Devonport.

At the annual meeting of governors of the Royal Albert Hospital held on Nov. 22nd the medical report stated that the number of patients treated during the past 12 months had been smaller than in the preceding year, but the cases were of a more serious nature, necessitating longer stay in the hospital. The financial statement showed that the balance against the hospital, which was £691 at the commencement of the year, now amounted to £2426. The managing committee expressed themselves "deeply conscious of the serious condition of this deficit," and made a strong appeal for increased financial support.

The Research Defence Society.

The annual meeting of the Devon branch of the Research Defence Society was held at the Museum Hall, Torquay, on Nov. 15th. Admiral Sir W. Acland, Bart., C.V.O., presided. Miss A. M. Corthorn, M.B., B.S. Lond., gave an interesting address on "Wherein Lies the Cruelty?"

A District Medical Officer's Salary.

At the last meeting of the St. Thomas's board of guardians it was decided to increase the salary of Mr. C. E. Gaitskell, the medical officer for the Lympstone district, Devon. from £12 to £18 per annum.

The late Robert Leamon Bowles, M.D.St. And., F.R.C.P. Lond.

Dr. R. L. Bowles died at his residence, Priors Mesne, Lydney, Gloucestershire, on Nov. 15th, in his eightieth year. Dr. Bowles qualified as M.R.C.S. Eng. in 1856. In 1875 he became a Member of the Royal College of Physicians of London, and in 1882 a Fellow thereof, graduating as M.D. St. Andrews University. Dr. Bowles practised for many years at Folkestone, and at the time of his death he was honorary consulting physician to the Folkestone Hospital and to the St. Andrews Convalescent Home. He was the author of a method of treatment of the apparently drowned, and contributed the article on Stertor to Quain's Medical Dictionary. Dr. Bowles had retired from active work for several years, and had recently taken up his residence at Lydney.

Dec. 9th.

SCOTLAND.

Insured Persons in Edinburgh Royal Infirmary.

IN view of the adverse effect of the National Insurance Act on the finances of the hospital, a representative number of delegates from Approved Societies and Insurance Committees in Edinburgh and the neighbourhood, on the invitation of the board of managers of the Royal Infirmary, met in their board-room for the purpose of an interchange of views on the subject of the steps to be taken in regard to the members of Approved Societies who received treatment at the institution. The managers some months ago passed resolutions whereby the wards were to be open as before to all persons, insured or non-insured, but at the out-patient department only cases of urgency, accident, or suitable for consultation could be seen. This scheme, which has now been in operation for ten months, has met with the approval of all persons concerned. After an account of the state of affairs by the chairman, followed by discussion of various points involved, the following motion was agreed to unanimously:—

Having heard the chairman's statement, and knowing the needs of the institution for funds, while we have no power to commit our societies to any definite sum, we as representatives agree to recommend all our societies to take the needs of this institution into their favourable consideration.

Medical Treatment for Edinburgh School Children.

An important development in connexion with the Edinburgh School Board this past session has been the introduction of a scheme providing for the special medical treatment of necessitous school children. Last year £850 was allocated to the board for this purpose, and accordingly premises

were taken in Lauriston-place, which were transformed into a medical treatment centre. Here four dentists, one ophthalmic surgeon, and two nurses have had charge of patients in their special departments, and 5251 have been attended to since January last.

A Successful Bazaar.

In view of the great need for funds to carry on the work satisfactorily at the hospital in Nazareth a bazaar was held in the Music Hall, Edinburgh, for two days last week. The amount aimed at was £5000, but so successful was the scheme that more than this sum was realised.

Edinburgh Royal Blind Asylum.

The annual report recently issued shows a considerable expansion in the sphere of work undertaken by the institution. During the year there were 290 inmates and 138 outdoor pensioners. The wages for workers were raised, the standard wage for men being increased from 20*s.* to 21*s.* At the end of the school year there were 26 boys and 28 girls in the school. The subscriptions remain about the same as in the previous year, but there has been a considerable increase on the sales, this year the amount being £20,411.

Highlands and Islands Medical Service.

A circular has been issued by the Highlands and Islands (Medical Service) Board asking for suggestions for the distribution of the fund. The board are convinced that the intention of the Act is to provide for a development and correlation of the existing public services so far as that can be effected by combination amongst the bodies concerned, and no payment will be made from the fund except as part of a well-considered scheme in which all of the existing services can be turned to the best account. The board insist that the bodies in question shall take reasonably full advantage of their powers under the statutes in force. The administration and application of the fund must be in accordance with a scheme, or schemes, prepared by the board and approved by the Secretary for Scotland, with the consent of the Treasury, and the board propose to proceed forthwith with the preparation of such schemes: but they feel that the needs of the several districts vary so much in character and extent that the views of the bodies concerned should first be obtained. Joint recommendations from the authorities of the larger areas would be particularly valuable wherever a scheme for the combination of such larger areas is regarded as at all practicable. A copy of this circular has been sent to all county councils, district committees, insurance committees, secondary education committees, district nursing associations, district lunacy boards, parish councils, town councils, and school boards, and to all medical practitioners in the area covered by the Act.

Dec. 9th.

IRELAND.

Dinner to Sir Andrew Horne and Sir Robert Woods.

A SIGNAL compliment was paid last week to Sir Andrew Horne and Sir Robert Woods, when, in recognition of the knighthoods recently conferred on them, their friends entertained them to dinner in the Hall of the Royal College of Surgeons. Some 150 guests sat down under the chairmanship of the Master of the Rolls. The Presidents of the two Royal Colleges attended with their maces, and the company included members of all the professions. Dr. James Little, senior Fellow of the Royal College of Physicians of Ireland, proposed the toast of "The Guests of the Evening." He emphasised the fact that the success which Sir Andrew Horne and Sir Robert Woods had attained in their respective branches of professional work had been gained by means which were approved both by their professional brethren and by the public.

Medical Men's Fees in Criminal Cases.

An application was made on Monday last to Mr. Justice Madden, sitting as judge of the Leinster Assizes, with reference to the fees allowed to medical witnesses appearing in criminal cases. Mr. Battersby, on behalf of a number of medical men, asked that the present fee of two guineas a day should be increased to three, and the expenses of 10*s.* a day to one guinea. He pointed out that the cost of living had increased since the scale was fixed, and that medical men leaving home had to employ substitutes to do their work. In civil cases the rules provided for three guineas a day, and the taxing master had power to increase that amount. In reply, the judge said that he understood the grounds of the application, but that he did not think he had power to interfere. The fees were fixed by the Treasury.

The Failure of Public Health Control in Scarlet Fever.

At the monthly meeting of the Belfast city corporation on Dec. 1st it was reported that between Oct. 19th and Nov. 15th, 1913, 369 cases of infectious disease had been notified—viz., 16 cases of typhoid fever, 35 diphtheria, 5 poliomyelitis, 5 membranous croup, 18 erysipelas, and 290 scarlet fever. The number of cases of infectious diseases notified were 45 in excess of those notified in the previous four weeks, while in the corresponding period of last year the number was only 156. The chairman of the public health committee said it was impossible to control an epidemic of scarlet fever owing to the large number of mild and undetected cases that acted as carriers. The medical officer of health had been requested to write to the medical officers of health of several large cities for statistics of their notification of scarlet fever for the past five years and for the first nine months of this year, and the following were the returns of their notifications:—

	Population.	1908 to 1912.	9 months of 1913.
Glasgow	1,021,500	17,467	2,330
Birmingham ...	859,644	22,217	5,541
Liverpool ...	756,553	18,990	1,520
Manchester ...	730,976	12,696	2,022
Leeds	457,295	6,444	926
Belfast	396,000	3,094	1,507
Bradford... ...	290,540	4,152	392

A letter was also read from Professor M. Hay, medical officer of health for Aberdeen, in which he said that for many years he had been of opinion that health departments were unable to do much to stay or hinder the progress of an epidemic of scarlet fever. If Professor Hay's views are the accepted ones by public health authorities, then it is clear that notification, combined with isolation hospital treatment and disinfection, are so far a failure in coping with such an epidemic disease as scarlet fever, and the enormous expenditure of municipalities in dealing with this disease is so much money thrown away.

Dec. 9th.

PARIS.

Projectile Wounds in the Balkan War.

ONE of the most interesting of the many surgical observations made by volunteer surgeons in the Balkan war is the report of Dr. O. Laurent, recently rendered to the Académie de Médecine. As regards penetrating wounds of the abdomen Dr. Laurent thinks that a large number may be cured by surgical intervention. The chief obstacle is the difficulty of having the necessary material at hand in the zone of fire, but when that can be done many lives are saved, while laparotomies performed at distant hospitals after a long and distressing transport of the wounded nearly always prove disastrous. Those medical men at the Academy who favoured non-intervention in penetrating wounds of the abdomen may be right as regards such wounds received in peace time, but on the field of battle intervention, though entailing undeniable risks, affords much better statistics. Dr. Laurent's experience shows that in modern warfare, where the soldier fires under cover as much as possible, either lying prone or from a trench, bullet wounds for the most part occur in the anterior part of the cranium or in the hands, especially the left. Wounds traversing the cranium from front to back, which are so frequently mortal, represent more than half the deaths that occur on the field of battle. Dr. Laurent suggests the use of a metallic shield, sufficiently light, yet resistant, to protect the head; another, fixed to the left hand or on the rifle itself; and a third to protect the region of the heart and the epigastrium, in which regions traumatisms are always exceedingly grave. Many soldiers have had their lives saved by the chance presence of a pocket-book filled with papers, or even of a metallic cigarette-case, in the left breast-pocket of their tunic. Superposed sheets of paper have always constituted, even in ancient wars, an excellent shield. As to the penetrative force of projectiles, Dr. Laurent shares the opinion of Delorme, and has always found it proportional to the speed of the ball, not as it issues from the arm, but at the time of impact. Up to 300, 400, or even 500 metres, veritable explosive effects may be seen. From that distance up to 1000 metres the wounds are less, and their gravity is dependent on the region affected. After 1000 metres, subject to the foregoing restriction, the wounds are of much lesser gravity. Dr. Laurent's statistics show from 82 to 84 per cent. of bullet wounds, from 15 to 17 per cent. of shrapnel wounds, and 1 per cent. of wounds by cold steel. Infection by the projectile was observed in 40 per cent. of cases by shrapnel and from 10 to 28 per cent. of bullet wounds. The number of wounds cured without any complication was 75 per cent. Shrapnel bullets have a much less penetrative force than rifle-bullets, at any rate when the shrapnel does not burst close to the soldier. Shrapnel bullets are very often found embedded in the clothes, but never rifle bullets.

Antityphoid Inoculation in the French Army.

Dr. Léon Labbé, senator and surgeon, has introduced a Bill to make antityphoid inoculation compulsory in the army. Dr. Labbé points out that typhoid fever occupies the most fatal place among infectious diseases in the army. During the last 20 years the French troops in France have had 66,000 cases of typhoid fever with 10,000 deaths. There has, indeed, been a progressive decrease since 1888, when the barracks were supplied with tap water or filters. In 1888 the mean was 4800 cases with 800 deaths. During the last few years it has been 1600 with 250 deaths. As compared with foreign armies the typhoid-rate, though on the decrease in the French army, is still high, and with troops in the field, where European prophylactic measures are almost impracticable as in Morocco, typhoid fever still remains one of the gravest scourges. In the American army antityphoid inoculation, which up to 1911 had been optional, had given such results that at that date it was made compulsory. The experiments in Morocco by Professor Vincent, of Val-de-Grâce, as also those of Professor Chantemesse, had given such striking results that hesitation was, according to Dr. Labbé, wrong. No accident had occurred in 100,000 inoculations, while the proportion of cases of typhoid had been as follows: inoculated, in France, 0 per 1000; in Eastern Morocco, 0 per 1000; non-inoculated, 38·23 per 1000 with 5·51 deaths. In Western Morocco, inoculated 2·96 cases per 1000 with 0·09 death; non-inoculated, 168·75 per 1000 with 21·291 deaths. A laboratory installed at the School of Military Medicine at Val-de-Grâce, where the vaccines of Professor Vincent are now prepared, has distributed the vaccines widely, supplying them even for the belligerents in the Balkan war. Dr. Labbé proposes that this inoculation should be made compulsory for all soldiers on enlistment.

Antigonococcic Vaccines.

Two antigonococcic vaccines are now in use in France. That of Dr. Besredka, of the Institut Pasteur of Paris, is prepared after the method of sensitised vaccines. It has the disadvantage of having to be freshly prepared, and cannot be kept. It appears to have given, especially in women, remarkable results. In metritis and salpingitis it has of itself been able to effect a cure without any other treatment, but in male urethritis in any stage and in vaginitis the results have been only moderate. Dr. Cruveilhier, who has used this treatment extensively, has perfected it in this last point by using ovules and tampons impregnated with the antigonococcic vaccine, after the method of Dr. Louis Martin in diphtheria, who has secured great amelioration by painting the diphtheritic plaques with the antitoxin in addition to giving it hypodermically. The vaccine of M. Nicolle (director of the Institut Pasteur at Tunis) and M. Blaisot keeps its properties for a long time and can be transported. It appears to be particularly active in the complications of blennorrhœa in the male, such as orchitis and prostatitis, in which it has given remarkable results, as well as in gonorrhœal rheumatism, but it has little effect in urethritis.

Death of Dr. Hérard.

Dr. Hérard, who recently died at the age of 94, was almost the *doyen* of the *médecins des hôpitaux* of Paris and of the members of the Académie de Médecine, having only one elder, Dr. Empis, now aged 96. Dr. Hérard had been professeur *agrégé* at the Faculty of Medicine of Paris, and 24 years ago was President of the Académie de Médecine. In collaboration with Cornil he wrote a treatise on pulmonary phthisis, which was for a long time an authority. Since his retirement he had devoted himself to the antituberculosis campaign, and was president of the administrative council of the Villepinte Sanatorium. He had been president of the Association Générale de Médecins de France.

He was a man of very high character, of marked uprightness, and of exemplary professional scrupulousness.

Dec. 9th.

BERLIN.

Meeting of University Professors.

A MEETING of teachers in all the faculties of the German universities was lately held in Strassburg, the principal subject of discussion being the granting of the doctor's degree. Professor Amira, of Munich, in his report stated that a rivalry existed between the individual universities as to granting the largest number of degrees. The question was greatly complicated by the fact that the professors had a financial interest in the granting of degrees—because they receive the fees paid by the candidates. There were great variations in the fees required by the individual universities, varying in the medical faculty, for instance, from 300 to 770 marks (from £15 to £33 10s.). The meeting adopted a resolution to the effect that the financial interest of the professors in the granting of degrees must be abolished, and that a commission should formulate proposals for this purpose and submit them to the next meeting. Another subject of discussion concerned the proposed foundation of new universities in several cities, as, for instance, in Frankfort, where the necessary funds are already collected; in Dresden, where the matter is still under discussion; and in Hamburg, where the plan has meanwhile been dropped. The proposed new universities, unlike the existing ones, are due to the initiative of the municipalities. They will not include the four classical faculties of the old universities, but only some of them, the theological faculty being absent, and in some the medical faculty also. Professor Beer, of Leipzig, and Professor Kaufmann, of Breslau, spoke against the proposed new universities. They said that it has been argued that the number of students in some of the existing universities, especially those in Berlin, Munich, and Leipzig, was much too great. The students, however, could not be induced to leave these universities for the new ones, and the result would be that still more young men would enter the academical professions owing to the facilities offered to them by the newly founded universities, although academical careers were overcrowded by about 40 per cent. The opinions of the last speakers were controverted by several of the audience, especially by Professor Ziegler, of Marburg, who declared that the competition of the proposed new universities would be a stimulus for the older ones to reform their programmes.

Prophylactic Inoculation for Varicella.

At a meeting of the Berlin Medical Society a foreign guest, Professor Medin, of Stockholm, read a paper on prophylactic inoculation against varicella. He said that attacks of varicella occurring in hospitals were not infrequently attended with severe symptoms on account of the presence of complications, especially nephritis. Attempts to convey the virus to healthy persons for the purpose of producing a milder form of the disease have not been successful until Professor Medin took up the investigation. During last August an epidemic of varicella broke out in the Stockholm Children's Hospital, where about 50 children, for the most part in the first year of their age, were attacked. Professor Medin succeeded in conveying the virus in 58 cases to healthy children, the result being that only a slight eruption of pustules appeared in the neighbourhood of the place of inoculation without any general symptoms. He was of opinion that the inoculated children had become immune by the inoculation. Photographs of the children were shown to the society, where the paper read by the distinguished guest was very much applauded.

Combination of Clerical and Medical Functions.

In a letter in THE LANCET of April 15th last I reported the case of a medical man who became a clergyman and obtained a benefice, but nevertheless continued to practise medicine for the benefit of the poor of his parish. Another instance of this unusual combination of clerical and medical functions has recently been reported by the daily newspapers, the difference being that a clergyman, while holding his clerical office, had completed a medical curriculum. The case happened in Saalfeld, in the neighbourhood of Jena, which is a University town, and acquired publicity from the fact that the clergyman, having passed the State examination, asked the vestry for one year's leave of absence for the purpose of hospital attendance during his practical year according to the regulations. The vestry has granted the request.

Dec. 8th.

ITALY.

Medical Representation in the Senate and the New Chamber.

OF the 29 newly nominated Senators three are members of the medical profession—Professor Girolamo Gatti, director of the Surgical Clinic of the Children's Hospital in Florence and a well-known writer on economic and agricultural subjects; Professor Ettore Marchiafava, consulting physician to His Holiness Pope Pius X. and director of the Institute of Pathological Anatomy in Rome; and Professor Carlo Forlanini, professor of clinical medicine in the University of Pavia, the inventor of the method of treatment of pulmonary tuberculosis by the induction of pneumothorax. The new Chamber comprises 36 medical men, including Professor Baccelli, Professor Santoliquido, Professor Casciana, and Professor Queirolo. Politically this medical group resolves itself into 16 Liberals, 10 Radicals, 7 Socialists, 2 Democrats, and 1 Republican. There were 92 medical candidates, of whom 45 were Liberals, 15 Radicals, and 22 Socialists. The last Chamber also contained 36 members of the medical profession.

The Eugenic Movement.

The Roman Society of Anthropology has recently taken the initiative in founding an Italian committee of distinguished scientists for the purpose of eugenic studies. The programme of the committee includes the study of the factors producing the decadence or progress of races, research on normal and pathological heredity, the importance of the condition of the organism at the time of the act of reproduction, and the influence of environment.

An Institute of Forensic Medicine.

There has just been opened in Milan an Institute of Legal Medicine. It consists of rooms for electro-diagnostic investigations, for X ray examinations, for anthropometric methods, and for photography; chemical, microscopical, and bacteriological laboratories; and a good library. Its object is the practice of the finer methods of medico-legal research,

the study of criminal psychology, and the scientific investigation of the results of accidents.

Compulsory Notification of Tuberculosis.

There is much talk of this with the idea of bringing Italy in line with England, Germany, and other countries where notification is now compulsory; but the Royal Society of Hygiene at Milan the other day voted that it should not be introduced until adequate provision has been made for the care of the sick and the protection of the public health. This stipulation applies especially to country districts. A proposal that notification should be compulsory in the great cities which are adequately equipped for treatment and prophylaxis was not agreed to. This seems a pity, for in these circumstances the so-called "denuncia silente" would not harm, and would probably benefit, the sick man, and would put a stop to such a state of things as the proposer of the motion stated to exist at Novara and Vercelli, where he declared that two-thirds of the subjects of tuberculosis sleep in the same room with healthy subjects and half of them in the same bed with non-infected persons.

Dec. 6th.

BUDAPEST.

Increase of the Fees for Medical Examinations for Life Assurance.

AT the October meeting of the Hungarian Medical Association a resolution was adopted to the effect that the medical profession, in view of the general rise of wages and the remarkable increase of the prices of provisions, will raise the fees of medical examinations for life assurance, which have remained unchanged for the last 30 years. The new fees will be as follows. If the insured sum is under 5000 kronen (about £208) the fee will be 10 kronen (8*s.* 4*d.*), and for sums above 5000 kronen the fee will be 20 kronen. The companies will be required to have these examinations made exclusively by their duly appointed medical officers, whom they must retain in their service unless gross negligence be shown, but even in this case the dismissal of a duly appointed medical officer must be reported to the insurance committee of the Association. If a medical officer calls on a proposer at an appointed time, and if the latter objects to being examined or cannot be found at the appointed time, the company will have to pay half his fee to the medical officer. The new tariff has been adversely criticised by the insurance companies, who object that they were not consulted at all before the resolution was moved. In reply to this the official journal of the Association remarked that it would have been superfluous, and even absurd, to ask the companies if they would like the fees to be increased, and the article went on to say: "If the Association passes a resolution, then it has reason to do so and need not inquire whether outside opinion approves or disapproves of its resolutions."

The Treatment of Cholera by Injections of Atropine.

Dr. Julius Oláh has published a work explaining the theory and practice of the treatment of cholera with injections of atropine. He says that on the ground of pathological investigations and pathologico-physiological deductions he regards cholera as an infectious disease in which the severest manifestation is the fall of the energy of the heart, which he attributes to over-excitement of the vagus nerve. Acting on this assumption he formerly treated cholera patients with camphor injections, but he acknowledges that he does not regard camphor as a specific remedy for cholera, because it acts as a stimulant of the nervous system, and does not reduce the hyper-excitement of the vagus nerve. He therefore continued his investigations in the hope of finding a drug which possesses this specific action. His pharmacological studies led him to believe that atropine, which is admitted to be an efficacious antidote in muscarine poisoning, owes its beneficial action to its power of counteracting hyper-excitement of the vagus nerve, sometimes even bringing it to a partially paralysed state. He accordingly claims to have discovered that atropine injected subcutaneously is capable of mitigating or even stopping the severest manifestation of cholera—namely, the fall of the energy of the heart—even in the most developed stage of an attack. An imperceptible pulse becomes perceptible in three or four hours after the injection of one milligramme of atropine, which fact proves the rise of the heart's energy. He emphasises the importance of beginning the atropine treatment at the first manifestations of an attack of cholera because by so doing the depression of the energy of the heart is prevented, and consequently the severest developments of the disease remain absent; neither cyanosis nor congestion supervenes, and the temperature of the body does not fall. The action of the kidneys may deteriorate somewhat, but the excretion of urine does not cease, and therefore anuria and consequent uræmia do not occur. By administering atropine to a cholera patient at the right time it is possible to reduce the severity of the attack to that of muscarine poisoning. In the closing pages of the book Dr. Oláh states that his aim in publishing it is to induce his colleagues to try the atropine treatment on patients under their care. He further remarks that his method might be advantageously tried in British India, where cholera is prevalent. He says that England was the country where the fight against small-pox originated in the eighteenth century, and where thousands of lives were saved thanks to the genius of Jenner. It would be a further triumph, he says, if England succeeded in checking the ravages of cholera by employing the atropine treatment.

Dec. 8th.

INDIA.

The Cause of Leprosy.

FOR some time past the Government of India have been contemplating an inquiry into the etiology and treatment of leprosy. The services of Major A. Gwyther, I.M.S., lately civil surgeon of Darjeeling, have been secured for the purpose. The Government of Bengal have already placed his services at the disposal of the Director-General of the Indian Medical Service, and it has been settled that Major Gwyther will be attached to a leper asylum in Behar for his inquiry. He will work under the auspices of the Indian Research Fund.

Queen Mary Medical College for Women.

The drawings and designs for the Queen Mary Women's Medical College and Hospital at Delhi are now being prepared by the architect to the Government of India. The buildings will be constructed

of red and white stone, and the design is on indigenous lines.

Yellow Fever in India.

For the present the invasion of India by yellow fever does not appear imminent. Major S. P. James, who was deputed to study yellow fever in its endemic area and recommend measures for averting the danger of the introduction of the disease into India, or stamping it out should it appear, has now returned to India, and is of the opinion that the opening of the Panama Canal will not immediately, at any rate, increase the present danger of India becoming infected with the disease. Should any of the countries further east, however, become infected the danger will, of course, become more imminent. He believes that the main trade routes are unlikely to be materially altered, and as they exist at present the chances of importing infected mosquitoes are not considerable. Honolulu, the first port of call, takes very thorough precautions against the disease, thus affording a strong protection against the infection of the East, and, after leaving Honolulu, ships to Hong-Kong pass northwards into latitudes not favourable to the life of yellow fever mosquitoes.

Sanitation in Mymensingh.

There are many sanitary defects in the town of Mymensingh, chief of which is the matter of drainage. There is no regular system. Even in the most crowded quarters the drains are very imperfectly constructed.

The Retirement of Surgeon-General Stevenson.

In commemoration of his great services the medical profession of Bombay has presented Surgeon-General H. W. Stevenson, I.M.S., with a farewell address on his retirement. His services to the Government have been recognised by several distinctions, the latest being that of C.S.I., but the passing of the Act for the Registration of Medical Practitioners, which was initiated and carried through by him in the face of great opposition, and his interest in the College of Physicians and Surgeons of Bombay, are rightly regarded as services to the profession at large.

The Health of the New Capital.

Few Indian cities show more noteworthy fluctuations in respect of public health than does the municipal area of Delhi. In 1907 and 1911, for instance, the total deaths exceeded 14,000, whereas in 1909 and 1910 they were between 9000 and 10,000. It is obviously the mortality among children under one year of age that maintains the figures at so high a level. This mortality, among a population of about 215,000 and within an area where the births annually number between 10,000 and 11,000, is certainly appalling—4577 infants died in 1908, 3270 in 1910, nearly 4000 in 1911, and 4091 in 1912. Only improved sanitation and medical reform can check the ravages of disease among the children of Delhi, and the people themselves must be stimulated to bring about a better state of things. As to the general health of Delhi in 1912, it is satisfactory to learn that the deaths from malaria were fewer by 2507 than in 1911, and that only 20 persons died from plague. Small-pox deaths, however, rose to 445, an increase of 141. The coming cold weather promises to be healthy, inasmuch as the failure of the later rains should prevent a prevalence of malaria.

Nov. 24th

AUSTRALIA.

National Insurance.

THE Federal Government is going on with the proposals for a scheme of National Insurance. The Bill is at present in the hands of the Hon. P. M. Glynn, who is making inquiry and collecting statistics. The Government statistician has issued circulars to medical societies and pharmacists asking for information and comment. It is considered unlikely that any legislation will be immediately introduced. In the first place, there is some doubt as to the permissibility of such legislation under the Constitution, and in any event the Friendly Societies, who are much more powerful in Australia than Great Britain, have shown themselves distinctly hostile up to the present time.

Small-pox in Sydney.

The small-pox epidemic in Sydney is still a troublesome visitation. Well over 1000 cases have been quarantined, and new cases are still occurring daily, though the average is notably less than formerly. The question of the quarantining of Sydney has become fiercely political. The Labour members in the Federal Parliament seek to discredit the Government by insisting on the urgent need for removing the quarantine, and they draw lurid pictures of the ruin and desolation of Sydney, which, it is needless to say, are purely imaginary. The serious disappointment has been the weak and spiritless attitude of the New South Wales Government towards vaccination. Mr. Holman, the Premier, brought down a Bill providing for compulsory vaccination and revaccination, but it was never an earnest attempt. The provisions were not to apply for a year, and any parent or other person liable could, by a simple declaration of conscientious objection before a magistrate, be exempted from vaccination altogether. The Bill was defeated, as everyone knew it would be, and the matter has now dropped until some new outbreak occurs. The character of the epidemic continues mild and no fatality has been recorded, save that of a female patient who died in childbirth at the quarantine station.

Summer Diarrhœa.

The New South Wales Government has decided to open a babies' hospital for the treatment of infants suffering from summer diarrhœa. The general direction will be undertaken by Dr. R. T. Paton, the Government medical officer, and a committee of women will manage the housekeeping and general organisation. In Melbourne the committee of the Lady Talbot Milk Institute made its annual pilgrimage to the Treasurer with a request for monetary assistance and received a sympathetic reply. For some reason, not quite apparent, this institution has evoked a good deal of hostile criticism, and it is a little difficult to obtain any clear idea of the actual results of its efforts. It has, however, a powerful medical committee, which seems to be satisfied that good work is being accomplished.

Charities Bill.

The Charities Bill in the Victorian Parliament has not yet been passed in the Lower House. The measure provides for the appointment of three commissioners who would exercise a general supervision over the working of public charities and distribute the annual Government grant. They would also have power to close existing institutions

and prevent new ones being inaugurated without their consent. The Bill has met with considerable opposition. The chief amendments so far are that the board has been increased from three to five members, and there is a demand that one or more shall be women. It is unlikely that the Bill will pass this session.

Nov. 7th.

Correspondence.

"Audi alteram partem."

EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—I shall be grateful if you will give space for this brief letter whereby I desire to draw the attention of your readers to the advertisement (page 57) of Epsom College and its Medical Foundation.

Particulars will be found therein (1) of the educational advantages offered by Epsom College as a secondary school with a very highly equipped modern side as well as a classical side of the first order; (2) of the Royal Medical Foundation attached to the College, by means of which a large number of pensionerships and foundation scholarships are provided for the necessitous members of the profession and their families; and (3) of the imperative need of rebuilding and enlarging the College chapel.

I should hope that the notice respecting the College chapel fund especially will meet the eye of many an old Epsomian, that it will be read by them with sympathetic interest, and that the fund will derive both direct and indirect assistance from them.

I am, Sir, yours faithfully,

HENRY MORRIS,
Honorary Treasurer.

Cavendish-square, W., Nov. 27th, 1913.

ADVERTISING AND CANVASSING UNDER THE NATIONAL INSURANCE ACT.

To the Editor of THE LANCET.

SIR,—In the report of the proceedings of the General Medical Council you have printed copies of the letters addressed by the Registrar to certain practitioners and the secretaries of Approved Societies concerned in the distribution of advertisements and in canvassing for the purpose of inducing the transfer of insured persons to the medical care of practitioners selected by the societies. By writing these letters the Council desired to warn practitioners whose conduct had actually been brought under its notice of the risk they were running, but there is reason to fear that the evil may be widely spread. Such action imperils the principle of the free choice of doctor, and it is the duty of the Council to protect this principle in the interests of the public. It cannot be tolerated that it should be set aside to suit the desire for power of Approved Societies or the short-sighted selfishness of a few medical practitioners, and these have now fair warning that by their conduct they are risking their position on the Register.

It must not be pleaded that the societies and not the doctors are responsible for the advertising and canvassing by which the latter are to benefit at the expense of their colleagues. The only safe course to be taken is to sever connexion with any society that attempts to gain control of the administration of medical benefit by advertising and canvassing in favour of its own medical nominees.

I am, Sir, yours faithfully,

ROBERT SAUNDBY.

Birmingham, Dec. 8th, 1913.

THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—Your leading article last week is a free sketch of some of the difficult points which the Departmental Committee will have to give advice upon—and for the greater part they concern the Faculty of Medicine only. It is quite clear that no report can be made, and no action can be taken upon any report after it is made, which will not be painful to some bodies or persons, but that is a situation which cannot be avoided, nor should too much trouble be spent in trying to avoid it. We do not in London want to have temporary peace bought by the introduction of any half-hearted scheme.

There is obviously no necessity that the professors should be only at three schools, so that one sure way of escaping trouble is indicated. The first proposal of the St. Bartholomew's Hospital Medical School which was given in evidence before the Royal Commission,[1] while expressing the view that for purposes of advanced teaching and research the establishment in London of cliniques under university professors is desirable, said that the University should appoint from among the present members of the staffs of the hospitals attached to the schools of the University or at some of the special hospitals a certain number of university professors and should provide them with adequate endowments. In this way, of course, all the existing 12 schools would be associated with the new University, and presumably it will not be beyond ingenuity to suggest a scheme by which that portion of the school which is integrally associated with the University curriculum should be brought under the control of the University. The administrative difficulties here would be much greater than they would be if the University started with complete control of two or three schools, adding others as necessities arose, but it may prove impossible to obtain over any schools, at any rate in their existing relations to hospitals, that complete control which would be necessary to carry out the professorial scheme which is the ideal of some. It may be possible to get something from 12 places when it is impossible to get all things from three.

I am, Sir, yours faithfully,

FRANK J. WETHERED.

THE APOTHECARIES' HALL OF IRELAND AND THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—I submit that the action of the General Medical Council in sending on to the Privy Council "for the information of their lordships" certain charges against the Apothecaries' Hall is grossly unconstitutional. I suggest that this action would not have taken place if their law adviser had been consulted.

Sir Donald MacAlister, who was not present at the meeting, has stated: "By successive judicial decisions it has been laid down that in its procedure the Council, sitting as a tribunal, must as

[1] Appendix to Fifth Report.

nearly as possible follow the forms and rules customary in other courts" (Smith's "Law for Medical Men"). It is unheard of in British legal precedure that an attempt should be made to prejudice a Court of Appeal by influencing the judgment of the court in a case not yet before it.

It is perfectly competent for the General Medical Council, after adequate consideration, to report to the Privy Council that the examinations of any university or corporation are "insufficient." It is not competent for the General Medical Council to forward documents containing charges against any university or corporation which might be calculated to deflect the judgment of the Privy Council in any case which might subsequently come before it.

It is true that the Apothecaries Hall appealed to the Privy Council for protection; it is also true that the Privy Council saw no sufficient reason for interfering at present, but that incident is now closed. The Privy Council has delivered its opinion after hearing both parties, but it cannot now listen to any further statements on the matter.

If one were to visit a judge in his private club and make statements against one of the parties in a case which might come before him he would sternly resent the action, even if it were only done "for his lordship's information." The only constitutional way in which the General Medical Council can bring the affairs of the Apothecaries' Hall before the Privy Council is by a statutory statement that the examinations "are insufficient." This it cannot possibly do, for the Apothecaries' Hall holds no less than 40 reports of inspectors of the General Medical Council solemnly declaring that the examinations of the Hall "are sufficient." Even if the General Medical Council were inclined to do so they cannot act otherwise than on the reports of their inspectors.

I am, Sir, yours faithfully,

J. C. MCWALTER, M.D., LL.B.,
Barrister-at-law, Governor of Apothecaries' Hall, Dublin.

Dec. 6th, 1913.

THE FACULTY OF MEDICINE OF THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—At a meeting of the Board of the Faculty of Medicine on Thursday last I moved the following:—

In continuation of the policy of their interim report, the Board of the Faculty of Medicine advises the Faculty to recommend that in the event of a constituent college or colleges being founded, on the lines of the Report of the Royal Commission, a wider degree of autonomy than that contemplated by the Report of the Commission shall be reserved for the schools other than the constituent colleges. It recommends that the privilege of reporting direct to the Senate, through the special committee for schools to be appointed by that body, shall not be given up, as the Report of the Commission suggests, when the constituent college or colleges and the new Faculty of Medicine come to be constituted.

This motion was passed *nem. con.*, all the members present voting for it with the exception of one member, who did not vote at all. The discussion left no doubt that the Board would prefer the realisation of the suggestions outlined in their interim report, which postulated, if it did not actually say so, that no constituent college or colleges, in the sense of the Commission's report, should be established, and that no division should thus be introduced into the medical schools of London by setting up a small and privileged class of collegiate teachers and students. But if such constituent college or colleges should actually come into being, the Board equally left no doubt that it greatly disliked the regulation imposed by the Commissioners by which the teachers at the schools would be subordinated to the teachers at the college, a subordination which would inevitably result from the requirement that the new Board of Studies should report to the new Faculty of Medicine, and not direct to the Senate. In this connexion a question has been raised which becomes important in view of the current consultations between the Departmental Committee and the hospital schools. What action would that committee take in the event of none of the existing schools consenting to transform itself into a constituent college in the sense given to that term by the Commission, which certainly must have considered the possibility of such a refusal? The Commissioners, I think, clearly suggest, but do not categorically say, that in that event an attempt would be made to found a new hospital school, created *ad hoc*. The opinions expressed by Mr. Abraham Flexner are so clearly the genesis of the medical recommendations of the report that Mr. Flexner's statements are often an invaluable gloss where there is any obscurity in the Commissioners' statement. As Sir Henry Morris writes:—

The sections of their report dealing with the Faculty of Medicine are in substance merely an abstract of Mr. Abraham Flexner's Bulletin No. 6 "On Medical Education in Europe," and of his evidence published in the Third Report of the Commissioners. Mr. Flexner's opinions on the preliminary sciences, where and how they should be taught; on the school unit; on the inter-relationship and mode of studying, and on research in pathology, bacteriology, biochemistry, and clinical medicine; on the changes thought to be required in clinical teaching owing to the rapid progress in sciences related to medicine; on the hospital unit, or the German system of clinical instruction and research; and on the question of the one-portal entrance to the Medical Register, are all approved and adopted by the Commissioners. (Sir Henry Morris, *Times*, August 14th, 1913).

Now Mr. Flexner says (Bulletin No. 6, p. 218):

Let us suppose that London University, reorganised on its teaching side, cut adrift the hospital schools, *creating its own hospital* (the italics are mine), or retaining for the present a single hospital ..... or more simply still, should by subvention enable one of its constituent colleges—viz., University College—to complete its medical plant on an academic basis by making with University Hospital a contract arrangement giving University College the right to designate and organise its hospital staff. ..... University Hospital would at the moment perhaps answer the needs of London medical students of university grade.

Again, Mr. Flexner, quoted by the Commission (p. 109, top), says:—

The first step in the direction of modernising medical education would appear to lie in the total conversion of an existing school or in the *creation in London of a new school* (the italics are mine).

Section 293 obviously indicates that the Commissioners would prefer to utilise one of the existing schools to making a new school, but also shows that they consider the possibility of making a new school if satisfactory arrangements cannot be made with any existing school. They point out (end of Section 301) that the hospitals do not belong to the medical schools, and

if they are required for a University Faculty of Medicine in London, the question of privilege of access to the great London hospitals cannot be treated as a matter of private

right or decided as if they were the private property of the existing medical schools.

They say (Section 302):—

> The proper course for the University would be to endeavour *in the first instance* to enter into an agreement with the executive authority of one or more of the London hospitals with regard to the future of the hospital medical school.

The inference from the clause I have italicised seems obvious that if this first attempt failed, in spite of the public right here laid down to appropriate a hospital to the use of the University, the latter should proceed to establish the new school. Although the Commissioners deprecate setting up an opposition to the existing medical schools, they plainly foreshadow such an opposition if no existing school wishes to comply with the conditions upon which alone it could be accepted as a constituent college. Whether they would find it an easy matter to establish a new hospital school with 600 beds is, of course, quite another question.

I am, Sir, yours faithfully,

Dec. 8th, 1913. E. GRAHAM LITTLE.

SEWAGE DISPOSAL IN THE SOUTH OF ENGLAND.

To the Editor of THE LANCET.

SIR,—Since returning to England I have been engaged to some extent in the interesting, if tiresome, occupation yclept house-hunting, and in paying a few visits to houses in the vicinity of London.

I find that it is a common practice in places where there is no main drainage, but where the subsoil consists of chalk, to discharge the house drainage into a so-called cesspool in the chalk. I say "so-called" because such pits have no concrete or cement bottoms as a rule. Even when the bottom is formed of bricks set in cement I find it is often the custom to knock one or two of the bricks out and thus allow the liquid contents of the pit to drain away into the underlying chalk. In many cases this is what the architect aims at. He is delighted to find chalk. It simplifies matters for him, and so the cesspit is not provided with a bottom, and the liquid sewage and the urine and the slop waters find their way into the permeable chalk, which, of course, is not infrequently a water-bearing area. Indeed, in one case which came under my notice the cesspit in the chalk was on the side of a steep slope at the base of which, half a mile distant, were two cottages which obtained their water-supply from a shallow well sunk in the chalk.

Surprised at these discoveries, I instituted further inquiries and found that the surveyors rarely, if ever, submit drainage plans to the medical officers of the districts. Indeed, I am credibly informed that in London itself it is the exception rather than the rule so to honour the medical officer of health.

Now surely there is something very far wrong here. It is true that, even with such methods prevailing, everything may go on swimmingly (in a double sense) for a long period, but in certain places, sooner or later, there is at least a possibility that enteric fever will make its appearance and take toll of human lives. It is because human lives, the lives of innocent people, may be at stake that I wish to draw attention to this state of matters, which, to my mind, is a blot upon the sanitary escutcheon of the south of England.

I can only say that things are further advanced in many of the colonies where perhaps men are brought closer into touch with the dire effects of faulty methods and of communicable disease. I do not know with whom rests the blame; I do not know if public attention has hitherto been directed to this insanitary procedure; but I do know that it is high time something was done to put matters right and to make certain that all drainage plans are passed by the local medical officer of health, who naturally would be conversant with the conditions governing the water-supply of his town or district.

An eminent architect with whom I discussed the matter assured me that he had no idea infection could travel far in the chalk. That such a view is erroneous is evident from a study of several outbreaks of disease. Especially instructive is the account given by Dr. J. C. Thresh in his valuable work, "The Examination of Waters and Water-supplies," on the outbreak of typhoid fever at the County Asylum, near Cambridge. Here the fluorescein test showed that water treated with the dye took some 103 hours to travel about 1200 feet westward from the test-pit, while after about nine days it had reached a distance of 2500 feet eastward of the pit. Doubtless it is true, as Dr. S. Monckton Copeman observed, that "it does not, of course, necessarily follow, because the fluorescein should have proved capable of detection at various points, inclusive of the asylum well, at so great a distance in different directions, from the point at which it was introduced, that bacteria, harmful or otherwise, would be equally capable of transmission for so considerable a distance." He states, however, that the results of the experiments were to be regarded as decidedly instructing and interesting.

Chalk has no doubt a certain purifying influence on water in virtue of the peculiar respiratory processes which go on in it, but I think few will be found to admit that it can act as a bacteriological filter and rapidly purify a specifically polluted supply. In any case, with the law as it stands and with such methods of procedure in force, it seems to me that there is undoubtedly "something rotten in the state of Denmark," and that an inquiry should be instituted and, where necessary, such steps taken as will safeguard the public in certain districts from the risk of water-borne disease.

I am, Sir, yours faithfully,

ANDREW BALFOUR, M.D. Edin., D.P.H. Camb.,
Late Medical Officer of Health, Khartoum.
The Wellcome Bureau of Scientific Research, 54A, Wigmore-street, London, W., Dec. 1st, 1913.

MARTIAL AND MEDICINE.

To the Editor of THE LANCET.

SIR,—Many laymen, including myself, besides members of the medical profession, will feel grateful to Dr. Raymond Crawfurd for his delightful lecture on "Martial and Medicine," published in your issue of Dec. 6th. He has set a precedent which might very well be followed in other directions besides that of medicine, for indeed Martial touches life on many sides. Meantime, we have to thank Dr. Crawfurd for a most interesting study, and, incidentally, for the very clever renderings of the epigrams which he quotes. In spite of his disclaimer at the beginning of the lecture, I, like the Colonel in "Patience," do not see how they could be improved. They are just what is wanted.

I wish, however, that under the head of "Malingering" he could have found space for the epigram (ii., 16) in which Zoilus puts in an "aeger"

for the sake of displaying his bed-coverings. It is worth quoting *in extenso*, with your permission, though I cannot venture on a translation in competition with Dr. Crawfurd's happy efforts.

Zoilus aegrotat: faciunt hanc stragula febrem.
Si fuerit sanus, coccina quid facient?
Quid torus a Nilo, quid sindone tinctus olenti?
Ostendit stultas quid nisi morbus opes?
Quid tibi cum medicis? dimitte Machaonas omnes.
Vis fieri sanus? Stragula sume mea.

Martial complains that lettuce is now served at the beginning of dinner, instead of the end, as formerly (xiii., 14), and Horace (Sat. II., iv., 59) makes Catius say that it "innatat acri Post vinum stomacho." He is speaking of means of encouraging to fresh efforts a drinker whose powers are flagging.

As for artificial teeth, they must have been badly fixed sometimes, as Canidia's denture witnessed when her teeth fell out as she fled with Sagana, in fright at Priapus's petulant protest against their infernal incantations (Hor. Sat. I. viii. 46 seqq.).

Lastly, though it has nothing to do with the case, may I say that I have always admired Martial as being, so far as I know (if one excepts the skit attributed to Robert Browning), the only poet who has ever admitted the rhinoceros into his verse?

I am, Sir, yours faithfully,

EDWIN A. EADE.

United University Club, Pall Mall East, Dec. 8th, 1913.

SPECIFIC DIFFERENCES AMONGST BACTERIA.

To the Editor of THE LANCET.

SIR,—I have read with very great interest the address of Dr. F. W. Andrewes in THE LANCET of Nov. 1st on the Nature and Degree of Specific Differences amongst Bacteria, because it indicates that at last the development of the science of bacteriology is trending in the direction of a view of the origin and transmission of infectious diseases which I elaborated—mainly on clinical grounds and on theoretical considerations based on our then existing bacteriological knowledge—as far back as 1882. The late Dr. W. B. Carpenter, Sir James Paget, as well as Sir William Broadbent, at whose instigation I read my first paper, entitled "Suggestions for a Modification of the Germ Theory of Disease," before the Medical Society of London, which was published in THE LANCET of March 18th, 1882, strongly urged me to pursue the subject from the standpoint of experimental bacteriological investigation, but unfortunately I was never afterwards so situated as to be in a position to do so.

The whole matter took its rise out of an extraordinary case of "the apparent *de novo* origin of a disease resembling in some marked characteristics four commonly supposed distinct specific diseases." These were typhus, typhoid, diphtheria, and smallpox, for which no origin was ever definitely traceable. The case was seen and its origin investigated by Dr. George Wilson, medical officer of health of the Mid-Warwickshire sanitary district, who expressed in a letter to me the difficulties of arriving at a diagnosis and of definitely ascribing the origin to any pre-existing case or cases, though sanitary defects were found on the premises.

The article in THE LANCET was followed up by a paper on the Etiology of the Acute Specific Diseases, read before the Public Health Section of the British Medical Association at Worcester in 1882, and published in the *British Medical Journal* of Sept. 30th of that year. The subject was elaborated in my book on "The Evolution of Morbid Germs" ("disease germs" or "pathogenic germs" would have been better), published in 1883 by H. K. Lewis, and now out of print. In addition to the facts contained in the articles and the reflections thereon and deductions therefrom, the book contained an analysis of recorded or submitted clinical instances of anomalies of transmission in the specific diseases, of which anomalies four classes were defined—viz., cases (1) in which one kind of specific disease appeared to have transmitted another kind; (2) of a character so indefinite that it would be difficult to class them; (3) in which a common source seems to have transmitted diseases of different type; and (4) of apparently *de novo* origin, with in some cases progressive development in specificity of characters. It also collected and analysed such bacteriological literature of the time as had a bearing on the subject, and definitely formulated a hypothesis, offered for further investigation, both from the clinical side by the study of anomalous cases of specific diseases, and from the experimental side by laboratory investigation into the results of environment and pabulum on the biological, and particularly the pathogenic properties of micro-organisms in relation to their characteristics as the effective agents in the production of the acute specific infectious diseases. The hypothesis in brief was as follows: "1. A micro-organism thrives and multiplies at the expense of the medium in which it lives, splitting up the proximate elements thereof, retaining some for food, freeing others, and thus producing an analytical change in the composition of the medium; finally returning thereto 'unorganised ferments,' 'organic alkaloids,' 'colouring matters,' and other excreta, which are the result of its own vital processes, thus inducing also a synthetical change. These changes in the chemical composition of the medium inevitably originate a series of phenomena, which in dead media are termed putrefaction or fermentation, in living media disease. In the latter case the alteration in the media produces also reactionary physiological phenomena, complicating those of a physico-chemical nature.

"2. On transference of this organism from its natural to a foreign medium, a 'struggle for existence' ensues. Should the organism fail to succeed in 'adjusting itself to its environment' it will die out; on the contrary, should it succeed in so doing it will be by adapting itself to some other kind of nutriment, its choice being probably influenced by one or both of two circumstances affecting the pabulum—viz., (1) abundance of any available kind; (2) greater or less similarity to the normal pabulum. The nature of the food selected, with the nature of the excreta dependent thereon, will determine the character of the changes induced in the medium, and consequently of the resultant phenomena, whether merely physico-chemical or also in addition physiological.

"3. The multiplication of generations, which proceeds very rapidly, will modify the original habits of the race, and originate an hereditary tendency to select, wherever it is forthcoming, a similar pabulum. This will entail similar excreta, and in a similar medium a totality of similar changes resulting in similar phenomena; while variations in both changes and phenomena more or less marked will ensue, in proportion to the difference between the media.

"4. Should a retransference into a very heterogeneous medium take place, the cycle will begin again at one.

"Here, then, we have an explanation of all the phenomena attendant upon the specific infectious diseases. Their origin is thus explained, their specificity is accounted for by successive cultivation in similar constitutions. Variability in transmission and nondescript cases merely mark a struggle for existence, ending in a survival of the fittest, which has had vitality enough to adjust itself to its new environment. Immunity, whether hereditary or acquired, may be supposed to consist in an alteration in the character of the ultimate tissue cells, consequent on their supremacy in the struggle with the bacterian invaders for oxygen and other needful materials; while indefinite incubation merely points to variations in the intensity and protractedness of the struggle between the germs and the tissue cells. *De novo* origin is no longer a bugbear, for it merely means evolution of function, as the result of a process of natural selection, and does not imply heterogenesis [more correctly, abiogenesis]; and finally, while evolution is shown to reign here as in Nature everywhere supreme, the specific diseases no longer mar the universal truth that pathology is 'physiology gone wrong,' and that disease, instead of being in itself an entity, is a mere departure from the normal line of health."

It appears to me obvious that the gaining and losing of morbific powers, the inordinate rapidity of bacterial multiplication rendering visible in a short space of time results invisible in longer-lived organisms—just as the development of a plant can be shown on the kinematograph—the greater intensity of the action of natural selection in short-lived organisms, the observed high degree of variability in bacteria, especially in relation to pathogenic power, and other points enumerated by Dr. Andrewes, show that the trend of bacteriological investigation no longer seems to impose a barrier on the clinical viewpoint I have suggested such as was imposed when the specificity and immutability of pathogenous bacteria—which, as I then asserted, was really the result of the idea of specific diseases—was more unquestionably held.

Finally, for any lack of definiteness in the nomenclature used in the foregoing passages I would point out that the book was written in 1883. I do not think there is much confusion in the main idea presented.

I am, Sir, yours faithfully,

London, Dec. 9th, 1913. KENNETH W. MILLICAN.

ABDOMINAL PAIN AFTER VACCINATION.

To the Editor of THE LANCET.

SIR,—In your annotation on this subject last week you state that this sequel appears to have been hitherto unobserved. May I point out that I described this condition in a paper read before the Association of Public Vaccinators in 1902?[1] I said: "In some delicate women vaccinia produces great epigastric pain, sickness, and intense pain in the lumbar spine or more probably in the sympathetic ganglia, while diarrhœa rarely supervenes." I compared the symptoms at the time to a mild attack of ptomaine poisoning, but clinically perhaps they are more like an attack of influenza in which the pancreas appears to be involved, or, as you suggest, the lumbar pain is comparable to the well-known lumbar pain in variola.

I am, Sir, yours faithfully,

Westerham, Dec. 5th, 1913. A. MAUDE.

[1] THE LANCET, Nov. 1st, 1902, p. 1190.

THE GOVERNMENT OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Dr. Sidney C. Lawrence, in your issue of Dec. 6th, pronounces the last part of my letter of Nov. 17th to be "not only insolent but untrue," a pronouncement which has the double merit of being, I presume, courteous according to "up-to-date views," and also, when addressed to an octogenarian, fairly safe. But if he had read before condemning he would have seen that my case was an illustration of his own argument. I was one of those of whom he speaks as being prevented by circumstances from "taking an extended period of study;" and, in order to obtain the Fellowship, I had to wait until I became entitled, by 12 years of practice as a Member, to offer myself for examination for the higher grade. His assumed impediment was overcome in my case, and might be overcome in any other.

I am, Sir, yours faithfully,

R. BRUDENELL CARTER.

Clapham Common, Dec. 10th, 1913.

ASSOCIATION OF ASSISTANT MEDICAL OFFICERS OF PUBLIC ASYLUMS.

To the Editor of THE LANCET.

SIR,—Circulars calling meetings of assistant medical officers of public asylums in England and Wales have recently been issued. Meetings have been held at Birmingham, Manchester, Bristol, and London. Communications expressing sympathy with the object of the meetings were received from all but 14 asylums.

The following resolution was unanimously passed at the meeting in London:—

Whereas there is widespread discontent on account of the disabilities under which assistant medical officers labour, Resolved, that this meeting elect representatives to meet representatives from other parts of the country to set up an association of assistant medical officers.

Similar resolutions were passed at the meetings at Birmingham, Manchester, and Bristol.

I am, Sir, yours faithfully,

F. J. STUART,
Provisional Secretary, Association of A.M.O.

Berry Wood, Northampton, Dec. 8th, 1913.

THE RELATION BETWEEN HERPES ZOSTER AND CHICKEN-POX.

To the Editor of THE LANCET.

SIR,—Early in November of this year a patient in the convalescent scarlet fever ward at East Pilton Hospital developed a profuse eruption of herpes zoster, the distribution being that of the lower dorsal and upper lumbar nerve roots of the right side. This patient was not isolated, but was nursed in the main ward. Exactly a fortnight after the eruption was noticed chicken-pox broke out in the ward, three patients being affected, and all three had been in the hospital considerably longer than three weeks, one being 40 days in and the other two 30 and 32 days respectively. All the cases were promptly isolated, and no further attacks occurred. The cause of the outbreak could not

therefore be ascribed to the usual source—i.e., a child incubating chicken-pox—and the only source, apart from the patient with the herpes, that I could discover was that the infection had been introduced on the clothes sent in to the convalescent patients from outside.

Of course, it is very difficult to find out the exact source of such an outbreak, but the association between herpes zoster and the cases of chicken-pox which has recently been discussed struck me as being exceedingly interesting.

I am, Sir, yours faithfully,

G. RICHARDSON, M.D., D.P.H.,
Assistant County Medical Officer of Health,
Dec. 6th, 1913. Carlisle.

THE ANATOMY OF THE PELVIS.

To the Editor of THE LANCET.

SIR,—May I correct a mistake in the remarks attributed to me in the paper by Dr. Batty Shaw and Mr. R. Higham Cooper on a Change Occurring in the Pelvis in a Case of Prepuberal Atrophy of the Testicles, which appeared in your issue of Dec. 6th? I am represented as saying that "the spine of the negro, unlike the European man's, shows a curvature with the convexity backwards." This is of course incorrect, the curve of the dorsal region of the spine in the two races being identical, although in negroes a smaller anterior convexity of the lumbar portion of the vertebral column has been stated to be present.

The point that I tried to make clear when the paper was read is that pelves of a similar type to that exhibited by Dr. Batty Shaw's interesting case are commonly associated with kyphosis, and are in consequence known as "kyphotic pelves." In such cases the sacrum stands higher and further back in the pelvis than usual, thus greatly increasing the antero-posterior diameter and tending to make the lumbo-sacral angle less prominent. The negro pelvis which I showed exhibited this condition in an extreme degree, but without kyphosis, so far as I can ascertain from an examination of the spine. But its general resemblance to the pelvis in Dr. Batty Shaw's case, and the fact that it belonged to a negro of over 6 ft. in height, renders the comparison of some interest.

I am, Sir, yours faithfully,

London, Dec. 8th, 1913. DOUGLAS E. DERRY.

IN recognition of her services to the hospital as Lady Mayoress, Miss Crosby, daughter of Alderman Sir Thomas Boor Crosby, has been appointed a governor of St. Bartholomew's Hospital.

ASSOCIATION OF REGISTERED MEDICAL WOMEN.—At a meeting of this association held on Dec. 2nd, the following resolution was carried:—"That the Association of Registered Medical Women—while recognising that the proposed scheme for a Women's Medical Service in India in many respects offers improved conditions for the work of women under the Dufferin Fund—desires strongly to protest against the scale of remuneration offered, which is entirely inadequate for the work which the medical women are asked to undertake, and also the subjection of medical women to a lay committee, for the constitution of which no guarantee is offered, yet which has the power of punishment for acts of which the committee may disapprove. The Association feels that these defects will be fatal to the success of the scheme, since no first-rate medical women will consent to work under such conditions." At the same meeting a resolution was passed condemning artificial feeding as performed in prisons upon sane and resisting persons by lay direction.

THE NATIONAL INSURANCE ACT.

THE REPRESENTATIVE BODY OF THE BRITISH MEDICAL ASSOCIATION AND THE INSURANCE ACT.

AT the recent Special Representative Meeting of the British Medical Association held in London under the chairmanship of Mr. T. J. Verrall, the following recommendations were moved by the chairman of Council, Dr. J. A. Macdonald, and adopted, the words following "10s. 6*d*." in the first being the result of two amendments:—

That where any medical practitioner not devoting his or her whole time to the work is called upon by a lay body to express an opinion as to the capacity or incapacity of an insured person, the lowest fee such practitioner should accept should be 10*s*. 6*d*., exclusive of expenses, after the practitioner in attendance has been given an opportunity of consultation in the case.

That the medical referees under the National Insurance Act should be appointed by the Commissioners and removable only by them; that they should be whole-time officers and practitioners of not less than ten years' standing; that the appointments should be pensionable, and that the commencing salary should be not less than £750 per annum.

That such portion of the unallocated funds in the hands of Insurance Committees as were attributable to insured persons who have been attended individually as private patients at their own expense should be distributed as a set-off to the medical bills of these patients.

That, in order to check the extension of medical aid institutions and to assist the profession in combating them where established, the Association endeavour to enlist the support of the staffs of voluntary hospitals, not only in refusing professional recognition to the medical officers of these institutions, but also by refusing treatment to patients sent by them to hospitals, except in cases of grave urgency.

A rider excluding the last resolution from application to institutions whose medical officers have retained their posts with the consent of the Council of the Association was approved by the meeting.

A motion deprecating the appointment of a special committee to promote the interests of non-panel practitioners was moved and lost, and a resolution was moved by Dr. B. G. Morison and carried:—

That the Representative Body take such instant and vigorous action as shall induce the Government and the Commissioners to grant to insured persons and the medical profession free choice of doctors, whether the doctor is on or off the panel.

THE TREATMENT OF TUBERCULOSIS.

In a recent circular the Local Government Board has asked for particulars of actual expenditure incurred by councils upon sanatorium schemes during the half year ending Sept. 13th, 1913, and of estimated expenditure for the following six months, and for financial estimates specified in regard to the financial year 1914–15. The Board appends observations as to the organisation of schemes for institutional treatment of tuberculosis and upon the procedure to be adopted in developing them. A memorandum follows describing the arrangements proposed by the Board in regard to the distribution of the maintenance grant towards the cost of schemes for institutional treatment. A draft agreement is included which is to be entered into between county councils or corporations and Insurance Committees for the institutional treatment of tuberculosis, prescribing the conditions under which the former are to appoint tuberculosis officers and to provide dispensaries, shelters, and accommodation in sanatoriums and hospitals.

CLAUSE 2 (ii.) OF THE NEW DRAFT AGREEMENT.

The *British Medical Journal* has announced that the Insurance Commissioners do not accept as accurate the report published by it on Dec. 6th of an interview between representatives of the Kent and Surrey Insurance Committees and Mr. S. P. Vivian, representing the Commissioners. The assumption, the Commissioners say, must not be made that if practitioners sign an agreement containing Clause 2 (ii.) they will be permitted to enter into independent agreements with third persons. The Commissioners appear now to be unwilling to recede from the strictest literal interpretation of Clause 2 (ii.). In a letter to the Kent Insurance Committee, dated Dec. 1st, the Commissioners did, however, indicate the broader view, for in that document they state that Clause 2 (ii.) does not apply to any matters outside the range of the agreement. It may fairly be argued that the concessions which the representatives of the Kent and Surrey Insurance Committees believed themselves to have obtained from Mr. Vivian in an interview on Nov. 29th had to do with matters outside the range of the agreement, that range having been first settled, so that the patients' rights were not obscured. This, we believe, was the view of Mr. H. W. Clothier, vice-chairman of the Kent Insurance Committee, who at the interview with Mr. Vivian submitted the various points for the two committees.

We referred last week to the existence of doubt as to what extent, under the Insurance Acts as they stand, the Commissioners can lawfully sanction extra payments by panel patients, and it seems fairly clear that some authoritative legal interpretation is here required.

THE ALLOCATION OF SURPLUS FUNDS IN LONDON.

The report of the Special Committee to decide on allocation of the surplus of the Panel Fund in London recommended that the London Insurance Committee should proceed to distribute among the medical practitioners on the panel the whole amount available, after deducting the sums applicable under the Regulations towards the cost of drugs and appliances. The report suggested also that the notice of this intention should be advertised, and that distribution should be postponed until Dec. 31st; and also that the Insurance Commissioners should be informed that the difficult situation had arisen owing to the framing of the Regulations by the National Insurance Commission. A Regulation which the Insurance Commissioners intend to adopt has now been submitted to the London Insurance Committee, which specifically states that the amounts in the Panel Fund available for the purpose of the payment to practitioners on the panel include, and shall be deemed always to have included, all moneys carried to the credit of the Panel Fund after the deduction of such sums as may be necessary for the purposes of Article 22 and Article 50 of the principal Regulations. There is no doubt that the London Insurance Committee, having Mr. Danckwerts's opinion in their minds,[1] do not feel safe in proceeding to distribution, although the chairman, Mr. J. A. Dawes, M.P., has received from the Chancellor of the Exchequer a clear recommendation to do so without fear. If litigation should take place we trust that it will be of a friendly and concerted character.

[1] THE LANCET, Nov. 22nd, 1913, p. 1507.

FORM MED. 16 (REVISED) AND FORM MED. 17 (REVISED).

Under the above reference headings the Insurance Commissioners have issued draft agreements to be entered into between persons undertaking to supply drugs and appliances and Insurance Committees and between persons undertaking to supply drugs (other than scheduled poisons and medicines which require to be dispensed) and appliances and Insurance Committees.

BIRKENHEAD INSURANCE COMMITTEE: AN IMPORTANT QUESTION.

A subject of considerable importance to medical practitioners on panels and to their patients was discussed at a recent meeting of the Birkenhead Insurance Committee, when Dr. J. Grimshaw moved "that the question of the general relation between medical referee, insured person, and panel practitioner be referred to the Medical Service Subcommittee for consideration and report." This was agreed to by the committee, with the substitution of Medical Benefit Subcommittee for Medical Service Subcommittee. The incident of practice under the Insurance Acts which led to Dr. Grimshaw taking this step was described by him in detail, and his account of it may be summarised as follows. He had been consulted by James Thompson, aged 62, a pipe-fitter, in August, and had certified him for sickness benefit as being unfit for work. A month later Thompson had a letter from his society asking him to meet their medical referee; this he showed to Dr. Grimshaw. Three days later Thompson showed Dr. Grimshaw his sick benefit sheet with Dr. Grimshaw's signature cancelled and the word "Fit" written on it, with the initials of the medical referee. Dr. Grimshaw wrote to the society protesting strongly against his patient being examined and his certificate cancelled without any consultation with, or instruction to, him. This was formally acknowledged, and Dr. Grimshaw took his patient to the physician of the Liverpool Stanley Hospital, who confirmed his opinion that the man was totally unfit for work, "suffering from a serious affection of the heart and blood-vessels, besides being the subject of chronic and progressive disease of the kidneys." He next sent the patient for examination to the Liverpool Royal Infirmary, where Dr. John Hay diagnosed a large aneurysm of the transverse arch with associated aortic regurgitation, and declared him quite unfit for work, either light or heavy, this being confirmed by a skiagram showing a large aneurysm taken by Mr. C. Thurstan Holland. Correspondence with the Insurance Commissioners brought a reply from them intimating that the rules of a society constitute conditions of membership, and that where the patient is examined by the society's medical referee "the opinion of any doctor so appointed, and that of the doctor on the panel treating the member, both constitute evidence to which Approved Societies may properly have regard, in determining whether or not a member is incapacitated. The question, however, as to whether such incapacity exists is in the first instance for the society to decide." Attention was then called to the provisions for appeal to the tribunal appointed under the rules of the society for the settlement of disputes, and for ultimate appeal to the Commissioners. The society refused to reply in writing to Dr. Grimshaw's communications or to pay the sickness benefit, and a strongly expressed letter of protest

against the situation thus produced written to the Insurance Commissioners by Dr. Grimshaw was laid before the Birkenhead Insurance Committee. He further informed them that he had secured the "poor man's lawyer" of the Charity Organisation Society to further the necessary appeal, and had advanced the 5s. necessary before the appeal could be proceeded with, a sum which his patient would otherwise have been unable to produce. In the circumstances the Insurance Committee decided that it could not interfere, but the motion recorded above was passed by it. Comment upon the ethical aspects of the case and upon the extent to which the interests of the patient are involved may be postponed. We quote, however, a resolution of the Dundee Division of the British Medical Association passed on Nov. 18th (which appears to anticipate such occurrences taking place): "That practitioners acting as medical referees under the National Insurance Act shall observe the following rules: (*a*) The referee shall communicate with the practitioner in attendance to enable him, if he so desires, to be present at the examination of the insured person by the referee." Since then, as appears in another paragraph, the Representative Body of the Association has adopted much the same view.

SWANSEA HOSPITAL AND INSURED PATIENTS.

At a recent meeting of the Swansea Hospital board of management a resolution was carried to the effect that a subcommittee should be appointed to inquire into the admission of insured (to which by an amendment was added "and uninsured") persons to the hospital. Allegations were made that medical men on the panel encouraged their patients to apply to the hospital, particularly for in-treatment, when they could and should be taken care of at home. A medical member of the board (Dr. F. Knight) commented on a general impression which, he said, was prevalent, that every accident, however trivial, should be treated at the hospital, and urged that every accident case should go first to a panel practitioner, if the patient was insured.

BRIGHTON INSURANCE COMMITTEE.

At a meeting of this committee the following resolution of the Sanatorium Benefit Subcommittee was reported, dealing with a topic of importance to other localities besides Brighton:—

That it be urgently represented to the Insurance Commissioners that a number of insured persons remove into Brighton from time to time on account of condition of health with the intention of applying for sanatorium benefit, and that in the committee's opinion it is necessary that steps should be taken as early as possible to so adjust this difficulty as to prevent an undue proportion of the cost of the treatment of tuberculosis falling upon Insurance Committees and town councils of health resorts.

A recommendation of the Medical Service Subcommittee was considered deprecating the retention on the pharmaceutical panel of a firm alleged not to be qualified to carry on business under the Pharmacy Acts, 1868–1908 owing to lack of qualified superintendence and management. Consideration was also given to a case reported upon by the same subcommittee in which a medical man was stated to have given a certificate of incapacity to an insured person not based upon personal examination at the time of the giving of the certificate, which had conduced to the payment of benefit to the insured person to which he was not entitled. Reference was made to the form of certificate in the new Regulations as likely to prevent the recurrence of incidents of this kind. The report asked that the medical man, who had given an undertaking not to offend again, should be censured, and this was done.

BRISTOL INSURANCE COMMITTEE.

At a recent meeting of the Bristol Insurance Committee interesting figures were given with regard to the cases submitted to the medical referee (Dr. B. Rogers) appointed nine months ago to deal with cases referred to him by medical men on the panel and by Approved Societies. In the last month the figures had been 50 cases referred, 17 pronounced unfit for work, and 33 either pronounced fit or not examined through their not attending. In the nine months' total 593 (193 from medical men and 400 from Societies), 213 were unfit for work and 380 fit or did not attend. This proportion and a total of 380 out of 120,000 insured did not, it was pointed out, support a charge that general malingering was depleting the funds of the societies. 462 applications for sanatorium treatment had been dealt with since July, 55 now receiving sanatorium treatment, 126 dispensary treatment, 57 domiciliary treatment, waiting for beds, 4. The work was "going on in an extremely satisfactory way." It was resolved to circularise deposit contributors urging them to join societies.

THE LATE DR. HORACE DIMOCK.

The Home Secretary has decided that it is not possible to hold an inquiry into the circumstances preceding the suicide of the late Dr. Horace Dimock. This is possibly a legal but none the less an unsatisfactory decision.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following medical and surgical degrees have been conferred:—

M.D.—J. W. Linnell, St. John's.
M.B., B.C.—H. W. Barnes, Jesus; and V. F. Soothill and W. A. Stokes, Emmanuel.
M.B.—G. M. Parker, Emmanuel.

DONATIONS AND BEQUESTS.—The late Rev. R. H. Jackson, of Clifton, has bequeathed £500 each to the Bristol Royal Infirmary and the Bristol Children's Hospital.—An anonymous gift of £500 has been sent to the Royal Waterloo Hospital for Children and Women.—The West End Hospital for Diseases of the Nervous System has received a donation of £300 from Miss Goudy, and a cot will be named in respect of this donation.

METROPOLITAN ASYLUMS BOARD: INSTRUCTION IN HOSPITAL ADMINISTRATION.—A three months' course of lectures and demonstrations in hospital administration for the Diploma in Public Health will be given at the North-Western Hospital, Hampstead, N.W., by Dr. J. MacCombie, medical superintendent, on Mondays and Thursdays at 5 P.M., beginning Jan. 5th; and at the Grove Hospital, Tooting Graveney, S.W., by Dr. J. E. Beggs, medical superintendent, on Mondays and Thursdays at 5 P.M., beginning Jan. 8th. The fee for the course is £3 3s., which must be paid in advance to the Clerk to the Metropolitan Asylums Board, Embankment, E.C.

THE joint annual general meeting of the executive councils of the National League for Physical Education and Improvement and the Mansion House Council on Health and Housing will be held at the Jerusalem Chamber, Westminster Abbey, to-day, Friday, Dec. 12th, at 4.30 P.M. The chair will be taken by Bishop Boyd

Carpenter, and the speakers will include Mr. J. A. Pease, M.P., Bishop Ryle (Dean of Westminster), Sir Henry Craik, M.P., and Sir James Crichton-Browne.

Dr. F. W. S. Stone has been elected chairman of the public health committee of the Dover town council.

LITERARY INTELLIGENCE.—Mr. H. K. Lewis announces for early publication a new work by Sir Thomas Oliver, entitled "Industrial Lead Poisoning," being an elaboration of a lecture recently delivered at the Royal Institute of Public Health; a reprint of the collection of essays and addresses by Sir William Osler, issued under the title of "Aequanimitas"; and new editions of Dr. Lewis Jones's book on "Ionic Medication," Dr. Dudley Buxton's handbook on "Anæsthetics," and Mr. Albert Taylor's "Sanitary Inspector's Handbook."

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM.—The Savill prize and medal has been awarded to Dr. Thomas Knowles Boney for his thesis on "Myasthenia Gravis." The prize and medal have been founded in memory of the late Dr. Thomas Savill, physician to the hospital. Candidates are required to attend at least 25 demonstrations in the out-patients' department, to pass an examination, and to submit a thesis on a given subject. The next examination will probably be held in July, 1914. A wish has been expressed by the memorial committee that the Savill lecture should be delivered by Dr. Harry Campbell, on a date to be announced later.

THE WORSHIPFUL COMPANY OF PLUMBERS: DINNER TO THE LORD MAYOR OF LONDON.—A dinner was given by the Worshipful Company of Plumbers to the Lord Mayor and Sheriffs of the City of London, representing the Corporation, and to a large group of representative guests on Dec. 5th at the Hall of the Armourers and Brasiers Company. The guests were received by the Master, Mr. W. D. Caröe, and the Wardens, Dr. F. J. Waldo and Mr. Edmond Knight. A good many speeches were made of a distinctly interesting nature. After the loyal toasts Sir Shirley Murphy proposed the health of the Lord Mayor (Sir Vansittart Bowater) in his character as guardian of the public health of the City. After picturing the horrors of the cholera outbreak in London, now 65 years ago, he showed how the appointment of that great man Sir John Simon to be medical officer of the City proved the inauguration in London of the reign of public health. He quoted from Sir John Simon's famous reports as Medical Officer to the Privy Council prior to his appointment as Medical Officer to the Local Government Board, and he congratulated the civic authorities of London on having done all in their power to advance the public health. The Lord Mayor, in his reply, included the proposal of the next toast, which bore the inclusive title of "The Public Health." The Master, speaking to the toast, referred to the antiquity of the Plumbers' Company, which had received its charter from King Edward III. in an interval between wars of conquest with France and Scotland, and showed what the Worshipful Company of Plumbers had done to maintain high sanitary standards. He begged all the assembly present to assist the efforts of the Company to raise and maintain the present high standard of sanitary plumbing which could only be done by a proper system of registration, and such a system could be effectively assisted by the general adoption of a custom of marking or signing constructive work. If the work of registered plumbers were identified by some signature of operative and employer the separation between registered, and therefore qualified, work and unqualified work would be marked. He closed by thanking the Master of the Armourers and Brasiers Company warmly for allowing the use of their hall on the occasion. Dr. G. Newton Pitt, the Master of the Armourers and Brasiers Company, speaking also to the toast of "The Public Health," pointed out that the administration which maintains good health must be, to a great extent, dependent upon the conditions of service of the medical officer of health, in whose hands the sanitary well-being of the country lies. He urged the necessity of the creation of whole-time men for the public health service, and of the giving to them of secured tenure of office, which would enable them to discharge their duties without fear of opposition from the members of any local authority. The toast of "The Guests" was happily given by Sir Vezey Strong, the replies being entrusted to Mr. John Slater, past Vice-President of the Royal Institute of British Architects; and Sir Arthur Whitelegge, Chief Inspector of Factories and Workshops to the Home Office. Among other guests present at a very interesting dinner were Dr Arthur Newsholme, medical officer to the Local Government Board; Dr. Herbert Williams, medical officer of health to the Port of London; Mr. Sydney Perks, City surveyor; Dr. W. J. Howarth, medical officer of health of the City of London; Mr. W. Curtis Green, President of the Architectural Association of London; and Dr. S. Squire Sprigge, editor of THE LANCET.

SOCIETY OF MEDICAL OFFICERS OF HEALTH: THE SCHOOL MEDICAL SERVICE GROUP.—A meeting of the School Medical Service Group was held on Saturday last, Dec. 6th, at the Royal Sanitary Institute, Dr. Robert Hughes in the chair, and Mr. Herbert Jones, the honorary secretary of the Society of Medical Officers of Health, being also present. Dr. Armly Ashkenny, the honorary secretary of the Group, read correspondence from school medical officers and assistant school medical officers serving in 30 counties and boroughs regretting inability to attend the meeting, but expressing hearty support of the main object of the movement—namely, to improve the status and remuneration of the officers of the School Medical Service. A resolution was passed—

That the honorary secretary of the group should communicate with officers of the School Medical Service who are willing to promote the objects of the group, and request their assistance in the formation of sub-groups corresponding to the branches of the Society of Medical Officers of Health, with the object of holding meetings locally to discuss matters affecting their status and remuneration and to promote social and scientific discussions of interest to the service.

Dr. Ashkenny will be glad if assistant school medical officers and assistant medical officers of health performing school work, both ladies and gentlemen, would communicate with him at 38, George-road, Edgbaston, Birmingham, in reference to organising the service in the provinces. The meetings of the group will be held on Saturday afternoons, and the next meeting will be held in London on Saturday, Jan. 3rd, 1914.

BOOKS, ETC., RECEIVED.

ASH AND CO., LIMITED, 2, Exchange Parade, Southwark-street, and Henry-street, Tooley-street, London, S.E.

A Handbook of Sanitary Law for the Use of Candidates for Public Health Qualifications. By B. Burnett Ham, M.D., M.R.C.S., D.P.H. Camb. Seventh edition. Price 3s. 6d. net.

BELL, G., AND SONS, LIMITED, London.

War and Women. From Experience in the Balkans and Elsewhere. By Mrs. St. Clair Stobart, Founder of the Women's Convoy Corps. With a Preface by Viscount Esher, G.C.B. Price 3s. 6d. net.

CHURCHILL, J. AND A., London.

A Course of Lectures on Medicine to Nurses. By Herbert H. Cuff, M.D., F.R.C.S., Medical Officer for General Purposes to the Metropolitan Asylums Board. Sixth edition. Price 5s. 6d. net.

A Short Practice of Midwifery for Nurses. Embodying the Treatment Adopted in the Rotunda Hospital, Dublin. By Henry Jellett, B.A., M.D. Dublin University, F.R.C.P.I. Fourth edition, revised. Fourteenth thousand. Price 7s. 6d. net.

FISCHER, GUSTAV, Jena.

Pathologische Anatomie. Ein Lehrbuch für Studierend, und Aerzte. Bearbeitet von L. Aschoff, M. Askanazy, H. Beitzke, C. Benda, M. Borst, A. Dietrich, P. Ernst, E. v. Gierke, L. Jores, R. Kretz, O. Lubarsch, O. Naegeli, R. Rössle, M. B. Schmidt, H. Schridde, E. Schwalbe, M. Simmonds, und C. Sternberg. Herausgegeben von L. Aschoff, Freiburg i.Br. Dritte Auflage, Erster Band: Allgemeine Aetiologie; allgemeine pathologische Anatomie. Zweiter Band: Spezielle pathologische Anatomie. Price M.31.50.

FROWDE, HENRY, AND HODDER AND STOUGHTON, London.

Oxford Medical Publications. The Practitioner's Practical Prescriber and Epitome of Symptomatic Treatment. By D. M. Macdonald, M.D., Medical Officer of Health, Leven, Fife. Price 5s. net.

SOTHERAN, HENRY, AND CO., 43, Piccadilly, and 140, Strand, London, W.C.

Colloquies on the Simples and Drugs of India. By Garcia da Orta. New edition (Lisbon, 1895) edited and annotated by the Conde de Ficalho. Translated, with an Introduction and Index, by Sir Clements Markham, K.C.B., F.R.S. Price £2 2s. net.

STEPNEY PRESS, THE, 43, White Horse-lane, London, E.

Constructive Conservatism. By Harry Roberts. With an Introduction by L. S. Amery, M.P. Price 1s. net.

UNIVERSITY PRESS, Cambridge.

A National System of Education. By John Howard Whitehouse, M.P. Price 2s. 6d. net.

Appointments.

Successful applicants for vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.*

BLANDFORD, J. J. GUTHRIE, M.R.C.S., L.R.C.P. Lond., has been appointed Medical Superintendent of the Whalley Asylum, Lancashire.

CARILL, HILDRED B., M.D. Cantab., M.R.C.P. Lond., has been re-appointed Clinical Assistant at the West End Hospital for Diseases of the Nervous System.

FAIRBANK, H. A. T., M.S. Lond., F.R.C.S. Eng., has been appointed Surgeon to In-patients at the Hospital for Sick Children, Great Ormond-street.

JAMES, W. WARWICK, F.R.C.S. Eng., L.D.S., has been appointed Assistant Dental Surgeon to the Middlesex Hospital.

LLOYD, BERTRAM A., M.B., B.S. Lond., F.R.C.S. Eng., has been appointed Surgeon to Out-patients at the Birmingham and Midland Free Hospital for Sick Children.

MCLEAN, ALEX. G., M.B., Ch.B. Aberd., has been appointed House Physician at the West End Hospital for Diseases of the Nervous System.

MARTYN, H. SOMERVILLE, M.B., Ch.B. Glasg., has been appointed Ophthalmic Surgeon for School Children to the Airdrie, Clarkston, and New Monckland School Boards Joint Committee.

RIVERA, F. E., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon at the Eye Hospital, Oxford.

ROBERTSON, W. A., M.B., Ch.B. Edin., has been appointed Honorary Surgeon to the Hartlepools Hospital.

WALKER, NORMAN PURVIS, M.D. Edin., has been appointed an additional Member of the Highlands and Islands Medical Service Board.

ERRATA.—GREAT NORTHERN CENTRAL HOSPITAL.—We are asked to correct the information regarding certain appointments at this hospital which was officially sent to us and printed in our issue of Nov. 29th, p. 1593. The appointments should read as follows:—

COLE, P. C., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon at the Great Northern Central Hospital.

COUCHMAN, H. J., M.B., B.C. Cantab., has been appointed House Surgeon at the Great Northern Central Hospital.

IDRIS, A. E. W., M.R.C.S., L.R.C.P. Lond., has been appointed House Physician at the Great Northern Central Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ALNWICK INFIRMARY.—House Surgeon, unmarried. Salary £140 per annum, with board and apartments.

ARGYLE AND BUTE ASYLUM, Lochgilphead.—Assistant Medical Officer, unmarried. Salary £200 per annum, with apartments, board, and laundry.

BATH, ROYAL MINERAL WATER HOSPITAL.—Resident Medical Officer. Salary £120 per annum, with lodging, board, and washing.

BELGRAVE HOSPITAL FOR CHILDREN, Clapham-road, S.W.—House Surgeon for six months. Salary at rate of £75 per annum, with board, residence, &c.

BIRMINGHAM CITY FEVER HOSPITAL, Little Bromwich.—Assistant Medical Officer. Salary £150 per annum, with board and residence.

BIRMINGHAM CITY HOSPITAL, Lodge-road.—Assistant Resident Medical Officer. Salary £150 per annum, with board, residence, &c.

BIRMINGHAM, QUEEN'S HOSPITAL.—Two House Surgeons for six months. Salary at rate of £50 per annum, with board, lodging, and washing.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary £85 per annum, including board, residence, &c.

BOURNEMOUTH, ROYAL VICTORIA AND WEST HANTS HOSPITAL, Boscombe.—House Surgeon for six months, unmarried. Salary £100 per annum, with board, lodging, and washing.

BRADFORD POOR-LAW UNION HOSPITAL AND WORKHOUSE.—Assistant Resident Medical Officer, unmarried. Salary £130 per annum, with rations, apartments, and laundry.

BRIGHTON, ROYAL SUSSEX COUNTY HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with apartments, board, and laundry.

CANCER HOSPITAL, Fulham-road, S.W.—Medical Registrar. Salary £100 per annum.

CANTERBURY, KENT AND CANTERBURY HOSPITAL.—Senior House Surgeon and Junior House Surgeon, unmarried. Salaries £100 and £90 per annum respectively, with board, lodging, and washing.

CARDIFF, KING EDWARD VII.'s HOSPITAL.—Two Honorary Assistant Physicians.

CARMARTHEN, JOINT COUNTIES ASYLUM.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, &c.

CARSHALTON, SURREY, QUEEN MARY'S HOSPITAL FOR CHILDREN.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing.

CHARING CROSS HOSPITAL.—Medical Registrar.

CHESTER, COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £200 per annum, with board, lodging, and washing.

CHESHIRE EDUCATION COMMITTEE.—Fourth Assistant to Chief School Medical Officer. Salary £350 per annum.

COLCHESTER, ESSEX COUNTY HOSPITAL.—House Physician and House Surgeon. Salary £100 per annum each, with board, washing, and residence.

COVENTRY AND WARWICKSHIRE HOSPITAL, Coventry.—House Physician. Salary £110 per annum, with residence, board, laundry, and attendance.

CROYDON GENERAL HOSPITAL.—Additional Member of Honorary Medical Staff.

DERBY, DERBYSHIRE ROYAL INFIRMARY.—House Surgeon and House Physician. Salary £100 per annum each, with apartments, board, &c. Also Assistant House Surgeon for six months. Salary at rate of £60 per annum, with apartments, board, &c.

DINAS MAWDDWY, Merioneth.—Medical Officer, &c. Salary about £110 per annum.

DOUGLAS, NOBLE'S HOSPITAL, ISLE OF MAN.—Resident House Surgeon, unmarried. Salary £100 per annum, with board and washing.

DUNBARTON COUNTY EDUCATION COMMITTEE.—Medical Inspector of School Children. Salary £300 per annum.

EXETER, ROYAL DEVON AND EXETER HOSPITAL.—Assistant House Surgeon for six months. Salary at rate of 100 guineas per annum, with board, apartments, and washing.

GOVAN DISTRICT ASYLUM, Crookston, near Glasgow.—Senior and Junior Assistant Medical Officers. Salaries £250 and £200 per annum respectively, with apartments, board, and laundry.

GRANGE-OVER-SANDS, WESTMORLAND CONSUMPTION SANATORIUM AND HOME, Meathop.—Second Assistant Medical Officer. Salary £150 per annum, with board and laundry.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Physician for Diseases of the Skin.

GREAT YARMOUTH HOSPITAL.—House Surgeon, unmarried. Salary £100 per annum, with board, lodging, and washing.

GUILDFORD, ROYAL SURREY COUNTY HOSPITAL.—House Surgeon. Salary £100 per annum, with board, residence, and laundry.

HALIFAX ROYAL INFIRMARY.—Third House Surgeon, unmarried. Salary £80 per annum, with residence, board, and washing.

HAMLET OF MILE END OLD TOWN INFIRMARY.—Junior Assistant Medical Officer. Salary £140 per annum, with board, lodging, and washing.

HAMPSHIRE COUNTY COUNCIL.—Assistant County Medical Officer of Health. Salary £300 per annum.

HASTINGS, EAST SUSSEX HOSPITAL.—Senior House Surgeon. Salary £100 per annum, with residence, board, and washing. Also Assistant House Surgeon. Salary at rate of £80 per annum, with residence, board, and washing.

HOSPITAL FOR WOMEN, Soho-square, W.—Resident Medical Officer for six months. Salary at rate of £80 per annum.

HULL ROYAL INFIRMARY.—Casualty House Surgeon for six months. Salary at rate of £80 per annum, with board and lodging.

INDIAN MEDICAL SERVICE.—Commissions in His Majesty's Indian Medical Service.

KENSINGTON AND FULHAM GENERAL HOSPITAL, Earl's Court, S.W.—Resident Medical Officer. Salary at rate of £50 per annum, with board and laundry.

KETTERING AND DISTRICT GENERAL HOSPITAL.—Resident Medical Officer, unmarried. Salary £100 per annum, with board, residence, &c

LABORATORIES OF PATHOLOGY AND PUBLIC HEALTH, 38, New Cavendish-street, W.—Fifth Assistant Pathologist. Salary £170 per annum.

LANCASTER, COUNTY ASYLUM.—Assistant Medical Officer, unmarried. Salary £250 per annum, with board, apartments, washing, and attendance.

LEEDS GENERAL INFIRMARY.—House Physician for six months. Also House Surgeon. Each with board, residence, and laundry.

LIVERPOOL UNIVERSITY, FACULTY OF MEDICINE.—Lectureship in Laryngology.

LOWESTOFT HOSPITAL.—House Surgeon, unmarried. Salary at rate of £150 per annum, with board, residence, and laundry.

MACCLESFIELD GENERAL INFIRMARY.—House Surgeon. Salary £125 per annum, with board and residence.

MAIDSTONE, KENT COUNTY ASYLUM.—Fourth Assistant Medical Officer, unmarried. Salary £200 per annum, with quarters, attendance, washing, &c.

MAIDSTONE, WEST KENT GENERAL HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with board, lodging, and laundry.

MANCHESTER, CORPORATION OF.—Assistant to the Medical Officer of Health. Salary £300 per annum.

MANCHESTER, MONSALL FEVER HOSPITAL.—First Medical Assistant and Third Medical Assistant. Salary £200 and £130 per annum respectively, with board, lodging, and washing.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen-square, Bloomsbury, W.C.—Senior House Physician. Salary £50 per annum, with board and residence.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, N.W.—Senior Clinical Assistant (female) in Ophthalmic Department.

NORWICH, NORFOLK AND NORWICH HOSPITAL.—House Surgeon, unmarried. Salary £80 per annum, with board, lodging, and washing.

NOTTINGHAM CITY EDUCATION COMMITTEE.—Third Medical Inspector. Salary £300 per annum.

NOTTINGHAM GENERAL DISPENSARY.—Resident Surgeon, unmarried. Salary £220 per annum, with apartments, attendance, light, and fuel.

OXFORD COUNTY ASYLUM, Littlemore, near Oxford.—Assistant Medical Officer. Salary £200 per annum, with apartments, board, and washing.

PLYMOUTH, SOUTH DEVON AND EAST CORNWALL HOSPITAL.—House Physician for six months. Salary £90 per annum, with board, residence, and washing.

PRESTON COUNTY BOROUGH.—Tuberculosis Officer and Assistant Medical Officer of Health. Salary £400 per annum.

PRESTON, COUNTY ASYLUM, Whittingham.—Assistant Medical Officer, unmarried. Salary £250 per annum, with board, apartments, and washing.

PRINCE OF WALES'S GENERAL HOSPITAL, Tottenham, N.—Honorary Medical and Surgical Registrar. Salary £20 per annum.

ROYAL EYE HOSPITAL, Southwark, S.E.—Senior and Junior House Surgeons for six months. Salary £70 and £50 per annum respectively, with board and residence. Also Clinical Assistants.

ROYAL LONDON OPHTHALMIC HOSPITAL.—Third House Surgeon. Salary at rate of £50 per annum, with board and residence.

ST. MARY'S HOSPITAL, Paddington, W.—Resident Assistant Anæsthetist for six months. Salary at rate of £100 per annum, with board and residence.

ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, Plaistow, E.—Junior Resident Medical Officer for six months. Salary at rate of £70 per annum, with residence, board, and laundry.

SALFORD UNION INFIRMARY.—Senior Assistant Medical Officer, unmarried. Salary £130 per annum, with apartments, attendance, and rations.

SHEFFIELD, CHILDREN'S HOSPITAL, Western Bank.—House Surgeon. Salary £100 per annum, with board and residence.

SHOREDITCH INFIRMARY, Hoxton-street, N.—Junior Assistant Medical Officer for six months. Salary £150 per annum, with board, apartments, and washing.

SHROPSHIRE EDUCATION COMMITTEE.—Medical Inspector. Salary £250 per annum.

SWANSEA GENERAL AND EYE HOSPITAL.—Third House Surgeon. Salary £125 per annum, with board, washing, and attendance.

SUNDERLAND UNION WORKHOUSE AND COTTAGE HOMES.—Resident Assistant Medical Officer, unmarried. Salary £200 per annum, with rations, apartments, and washing.

TAUNTON, SOMERSET AND BATH ASYLUM, Cotford.—Assistant Medical Officer, unmarried. Salary £200 per annum, with apartments, board, washing, attendance, &c.

WAKEFIELD, WEST RIDING ASYLUM.—Assistant Medical Officer. Salary £200 per annum, with apartments, board, washing, and attendance.

WALTHAMSTOW URBAN DISTRICT COUNCIL ISOLATION HOSPITAL, Chingford.—Resident Medical Officer. Salary £150 per annum, with rooms and board.

WIGAN, ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £100 per annum, with rations, apartments, and washing. Also Third House Surgeon (female) Salary £100 per annum, with rations, apartments, and washing.

WINCHESTER, ROYAL HAMPSHIRE COUNTY HOSPITAL.—House Physician. Salary £80 per annum.

WINDSOR, KING EDWARD VII. HOSPITAL FOR WINDSOR, ETON, AND DISTRICT.—Assistant House Surgeon. Salary £76 per annum, with residence, board, laundry, and attendance.

WORCESTER GENERAL INFIRMARY.—Resident Medical Officer. Salary £150 per annum, with board, residence, and washing. Also Clinical Assistant and Dispenser. Salary £80 per annum, with board, residence, and washing.

THE Chief Inspector of Factories, Home Office, London, S.W., gives notice of vacancies as Certifying Surgeons under the Factory and Workshop Acts at Blairgowrie, in the county of Perth; at Moville, in the county of Donegal; and at Newbury, in the county of Berks.

THE Home Secretary gives notice of a vacancy for a Medical Referee under the Workmen's Compensation Act, 1906, for Ampthill, Brackley, Buckingham, Kettering, Northampton, and Wellingborough County Courts. Applications should be addressed to the Private Secretary, Home Office, S.W., and should reach him not later than Dec. 31st.

*** The summary of vacant appointments, published weekly in this column, is, equally with other articles, the literary copyright of the Proprietors of THE LANCET.

Births, Marriages, and Deaths.

BIRTHS.

BARENDT.—On Dec. 4th, at Rodney-street, Liverpool, W., the wife of Frank H. Barendt, M.D. Lond., F.R.C.S. Eng., of a son.

DAVIDSON.—On Dec. 4th, at Western Parade, Southsea, the wife of Maurice Davidson, M.D., of a daughter.

KENNARD.—On Dec. 4th, at Bedford-square, W.C., the wife of Dudley Kennard, F.R.C.S., of a daughter (stillborn).

MARRIAGES.

FAWCITT—HIRST.—On Dec. 3rd, at St. John's Church, Dewsbury, by the Rev. Canon Monnington, Vicar of Broughton-in-Furness, assisted by the Rev. F. Sangster, of St. John's Church, Dewsbury, Dr. Richard Fawcitt, only son of the late Dr. J. W. Fawcitt, of Broughton-in-Furness, to Jessie Boyce, elder daughter of Mr. and Mrs. J. Hirst, of Ravensleigh, Dewsbury.

RAY—HEAVEN.—On Dec. 9th, at St. Mark's, North Audley-street, London, W., by the Rev. C. L. Arnold, cousin of the bride, assisted by the Rev. H. P. Cronshaw, vicar of the parish, Matthew Burrow Ray, M.D., of Harrogate, elder son of Richard Ray, of 12, Park-avenue, Harrogate, to Edith Charlotte Frances Heaven, widow of Captain Robert E. Heaven, elder daughter of the late Lord Henry Cholmondeley, and granddaughter of the third Marquess of Cholmondeley.

DEATHS.

JONES.—On Dec. 7th, at Drakefield-road, Balham, Sydney Jones, M.B., F.R.C.S., in his 83rd year.

LANDON.—On Dec. 7th, at 169, High-street, Homerton, N.E., Edward Landon, M.R.C.S. Eng., L.R.C.P. Edin., late Captain, R.A.M.C., aged 58. Interment at Abney Park Cemetery, Saturday, Dec. 13th. Cortège leaves residence at 2.30 P.M. Australian papers please copy.

PRESTON.—On Dec. 2nd, Theodore Julian Preston, Deputy Inspector-General R.N., of St. John's Park, Blackheath, S.E., and Norfolk House, Mundesley, Norfolk, aged 66.

WALKER.—On Dec. 4th, at Peckham Rye, S.E., Josiah William Walker, M.D., in his 81st year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

A CASE FOR DIAGNOSIS AND TREATMENT.

X Y Z writes: Can any of your readers help me with the treatment of an obstinate case of "middle pain"? The pain is obviously very acute, occurs exactly midway between successive menstrual periods and lasts for one or two days. It dates from a miscarriage five years ago and became gradually more severe until two years ago. I have tried the usual drugs and local treatment for uterine colic with unsatisfactory results. Two specialists have been consulted, and on the advice of one of them dilatation and curettage were performed 18 months ago. This treatment was followed by pregnancy which only lasted for seven weeks, the miscarriage being associated with very acute pain, resembling that of a ruptured ectopic gestation. Since then the middle pain has returned and is as severe as ever. The patient is 38 years old and has two children, 10 and 7 years old. There are no physical signs apart from a slight catarrh of the cervical canal. The menstrual periods are regular and practically painless. The patient enjoys perfect health between the "middle pain" attacks, and there are never any neurasthenic symptoms.

*** We refer to the matter in an annotation this week.—ED. L.

ASTROLOGY IN MEDICINE.

To the Editor of THE LANCET.

SIR,—I trust that with your well-known love of fair play you will kindly permit me to make a few remarks on this subject and to ask Dr. Mercier a few questions of public interest.

With all respect for the learned doctor, and with due acknowledgment of his candid admission that astrology was believed in and seriously studied "by the rarest intellects of their time, some of them, like Roger Bacon and Albertus Magnus, the rarest intellects of all time," I wish to ask: Does Dr. Mercier think that such rarest intellects were incapable of distinguishing truth from error, and could have accepted the superstitions associated in their day with astrology? Surely not. They accepted *astrologia sana* as Bacon (Lord Verulam) accepted it, as a part of physics and discarded superstition. One might as reasonably proclaim medicine nowadays to be "tomfoolery," on the ground of the superstitions connected with it formerly, as Dr. Mercier condemns astrology and pronounces it as "dead"—officially. Dr. Mercier's only argument against astrology on scientific grounds is the worn-out and utterly unfounded assertion that it was overthrown by Copernicus!

I cannot understand how Dr. Mercier could have forgotten to admit that Pythagoras anticipated the so-called discovery of Copernicus, and accepted the prevailing belief in astrology. That, also, Anaximander accepted it, although he taught that the fixed stars were centres of other systems and regarded the planets as unconnected with the earth. That, moreover, Democritus accepted it, although he explained the whiteness of the Milky Way which Herschel discovered by means of his powerful telescopes, which separate that immense nebula into its component stars, and maintained that more planets would be discovered in future ages.

Such facts show the puerility of the argument of modern astronomers, unwarily repeated by Dr. Mercier, that Copernicus overthrew astrology. Kepler was convinced, he says, "from an unfailing experience" that the celestial bodies—the major planets—do affect this earth, its atmosphere, and inhabitants. It is disappointing to find in Dr. Mercier's second lecture no facts in evidence of the falsity of astrology advanced. I may mention that I have, during more than half a century's close study of this subject, found many reasons for believing that there is much truth in *astrologia sana*. In my text-book ("The Text-book of Astrology," second edition. By A. J. Pearce. London: Simpkin, Marshall, Hamilton, Kent, and Co.) I have presented scores of horoscopes of children born with some mental or physical defect, or so delicate that they died early, their times of birth having been observed by medical men; also many instances of the coincidence of great epidemics with the maximum of planetary influence, &c. My experience leads me to respect the belief and to cherish the memory of the great men of ancient and mediæval times who found and published, without fear, many proofs, as they rationally believed, of that planetary influence which vibrates throughout the apparent vacancy of space, and which is no more difficult to comprehend, which is no more mystical, than is gravitation or attraction, or the pointing of the needle to the north. All the operations of Nature are mysterious until they can be understood.

Dr. Mercier said: "Surely we had every right to despise those who attributed all chronic diseases to the Sun, and acute diseases to the Moon." This is an error. Astrologers observed that the crises in chronic diseases were ruled and marked out by the Sun, and the crises of acute diseases by the Moon. Chronic diseases are ruled by Saturn, and were so named from *Kronos*, one of the ancient names of the planet, derived from the Hebrew word *Kron*, a horn—an emblem of power in the East.

Another source of error has crept in in the following quotation: "If the lord of the ascendant be propitious and free from adverse influences of the other planets, and Luna likewise, the illness will end favourably. ..... But if Luna, or the lord of the ascendant should be combust or *retrograde*," &c.

This reads as if the *Moon* is sometimes retrograde, a manifest error, as she is never retrograde, like the planets are sometimes, her motion being always direct in the ecliptic or in the order of the signs. No astrologer could ever make such a blunder as to write of the Moon as occasionally retrograde. Dr. Mercier ridicules the belief of that eminent man Guy de Chaliac that the outbreak of the "Black Death" in the middle of the fourteenth century was due to the great conjunction of Saturn, Jupiter, and Mars in *Aquarius* on March 24th, 1345. Neptune was also in the same sign at that time—a planet unknown then. Such a doryphory of great planets in *Aquarius*, a sign which is found to relate to epidemic diseases, certainly foreshadowed the outbreak of a pandemic; and if Dr. Mercier will compare the periods of great conjunctions in Aquarius he will find that great epidemics always coincided therewith. If Dr. Mercier had directed attention to the immense difference made by the discovery of Uranus and Neptune, he would have recognised that many mistakes of ancient and mediæval astrologers were due to their being unaware of the existence and relative positions of these distant planets.

I hope Dr. Mercier will forgive me for directing attention to the above points. I am sure that he meant to be as fair as possible in his delineation of mediæval astrology; in fact, he proved this intention by the last paragraph but one of his second lecture. I should be happy to meet Dr. Mercier in friendly debate on this important subject before any learned society or private assembly.

I am, Sir, yours faithfully,

Dec. 3rd, 1913. ALFRED J. PEARCE.

*** Mr. Pearce makes an appeal for publication which we have not been able to resist, but the view that the operations of nature are mysterious until they are understood cannot be advanced as a complete defence of mysticism.—ED. L.

MEDICAL PRACTICE IN URUGUAY.

Malaga.—In 1883 sanitary regulations were enacted to control the practice of medicine in this Republic. The Board of Public Hygiene only recognises medical diplomas issued by the University of Montevideo and the degrees of recognised foreign universities. The medical curriculum demanded by the University of Montevideo extends to six years. The above regulations specify the various examinations which have to be undergone in the country by candidates holding valid foreign diplomas before practice is allowed. The Uruguayan Consul-General for Great Britain (5 and 6, Clement's Inn, Strand, London, W.C.) would be able to give information regarding these conditions.

THE PSYCHOLOGY OF "DAMN."

To the Editor of THE LANCET.

SIR,—In an interesting paragraph with this title which appeared in THE LANCET of Oct. 4th, p. 1037, I think you rightly conclude that the virtue (or vice) of the expression resides rather in the intention than the content of the word used. You state, or imply, moreover, that this particular expletive constitutes swearing, *ipso verbo*. I think that this view may be controverted, or at least disputed, as there is the sanction of a good authority for its legitimate employment, at any rate in its adjectival form "damnable." John Bunyan, who confesses in his "Grace Abounding" that habitual cursing and swearing was one of the worst of his vices, goes on to mention how, to his own astonishment, he abandoned the practice. Yet in later years in the "Pilgrim's Progress," describing how Christian and Hopeful made their escape from Doubting Castle by means of the key "Promise," he says that "the last lock went *damnable* hard." If an author of such saintly repute, who expressly says that he had abandoned the use of profane language, uses such a term, it can hardly be regarded as an example of profanity. The edition of the "Pilgrim's Progress" from which I quote is the miniature form (Frowde, 1896), edited by Canon Venables. It is presumably a reprint of earlier editions. In most, if not all, modern popular editions of the classic the word "damnable" is mitigated to "desperately."

In another very well known book there is also an example of Bowdlerisation, which is worthy of note because of the loss of sense undergone in the process. In the ordinary modern editions of "Robinson Crusoe" (except, I believe, the "Globe," which is said to retain the old text unexpurgated), in describing Crusoe's escape from Sallee, and how he got rid of his companion Umley the Moor, it is said: "I took him by surprise, with my arm under his waist, and tossed him clear overboard." The mechanism of this feat is really quite unintelligible, and the description is not one that Defoe, who pictured to himself every circumstance as he wrote it, would have given. However, if we turn to an old edition of the immortal work (I am not the fortunate possessor of a copy of the first edition, though I have one, dated 1781, with Defoe's interesting preface) we find a different term used, which makes the manœuvre explicable and clever. Instead of "waist" Defoe says "twist"—i.e., the fork of the body; and it is easy to realise how the Moor's *corpus* was propelled into the sea by a good shove.

I am, Sir, yours faithfully,

F. LUCAS BENHAM, M.D.

Semaphore, South Australia, Nov. 5th, 1913.

WITHDRAWAL FROM THE PANEL.

Glossiana.—Our correspondent will find his questions fully answered in Clause 17 (2) of the revised Medical Benefit Regulations, to be obtained directly or through any bookseller from Wyman and Sons, Limited, 29, Breams Buildings, Fetter-lane, London, E.C., price 3½*d*.

HOUSING AND TOWN PLANNING ACT: A LITTLE ECONOMY.

To the Editor of THE LANCET.

SIR,—In order to secure the proper execution of this Act it is essential that a list be prepared of all houses in every district, and that each one in the list be marked with the number of the record relating to such house. On Dec. 31st some hundreds of tons of such lists now lying in the hands of the Clerks of the Peace of the various counties will become of the value of waste paper to the counties. I refer to the lists of Parliamentary occupier voters, and the lists of other occupier voters, as well female as male. These lists are almost complete lists of house occupiers, and with very little trouble might be made quite complete. If the Clerks of the Peace cannot be persuaded to give them to the rural and small urban district councils for public purposes, being but waste paper for their original purpose, then it were well that they be purchased at waste paper price, for they are of far more value than that for housing recording. Being arranged in parishes in different unions, the division is just such as a district council needs—namely, a list of undone work, and not a list, primarily, of work that they have accomplished. Many of my colleagues in the medical profession make a point of telling their councils what work they have accomplished, but I find it far better for the people to tell the council what they have left undone which ought to be done. We do not want to incur great expenses in printing, but when the expense is incurred, why should we not have the advantage of it, seeing that it is out of our pockets (ratepayers) that the money has come to print the voters' lists.

I am, Sir, yours faithfully,

Dec. 6th, 1913. A MEDICAL OFFICER OF HEALTH.

THE CASE OF MR. H. T. HAMILTON.

To the Editor of THE LANCET.

SIR,—In addition to the £62 13*s*. already acknowledged for this fund I have now to add the following subscriptions: Mrs. Grant, Barnes, £1 1*s*.; Mr. Randall, Barnes, £2 2*s*.

I am, Sir, yours faithfully,

W. H. GIMBLETT, M.D.

86, Sutherland-avenue, Maida Vale, W., Dec. 10th, 1913.

R. H. R.—Our correspondent does not say the purpose for which the motor car is required. We will presume, however, that it is required for use in practice and for occasional pleasure trips. A four-seater will therefore be advisable. If a chauffeur is to be kept personal knowledge about the car does not particularly matter, although this knowledge is very useful to all owners. Some driving lessons and elementary teaching as to the mechanism of the engine, and especially about the ignition, are, of course, needed by the man who intends to drive himself. The intelligent man will find nothing difficult about these lessons, and they will in most cases awaken his interest and quickly enable him to run his car for professional purposes with satisfactory results. The particular car mentioned by our correspondent, the Rover 12 h.p., has been driven by one of our staff this year between 5000 and 6000 miles, and he is thoroughly satisfied with it. The 1914 pattern is recommended, with sump under the float chamber, removable fuel tank, electric light (particularly convenient in medical practice), ventilators in the dash, and the extra length chassis. The catalogue price of both

the 1913 and 1914 cars is £350. There are, of course, quite reliable second-hand cars, but it is not advisable to attempt their purchase without the advice of some experienced friend. The car can be kept in a galvanised iron shed if the sides are matchboarded and felted. It starts up easily from cold on petrol, but is troublesome at times on benzol. Much useful information can be got from the "Motor Manual," price 1s. 6d., to be obtained at most railway bookstalls.

ERRATUM.—In our report of the National Dental Hospital dinner the chairman was made to give the credit of the demonstration of a nerve-supply in dentine to Dr. Smith Woodward. It was Mr. J. Howard Mummery to whom allusion was made.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

SOCIETIES.

ROYAL SOCIETY OF MEDICINE, 1, Wimpole-street, W.

TUESDAY.
GENERAL MEETING OF FELLOWS at 5 P.M.
Ballot for Candidates for Fellowship.

SECTION OF MEDICINE (Hon. Secretaries—H. Batty Shaw, John Fawcett): at 5.30 P.M.
Paper:
Dr. F. W. Scott Macfie and Dr. J. E. L. Johnston: Experiments and Observations on Yellow Fever.

WEDNESDAY.
SECTION OF THE HISTORY OF MEDICINE (Hon. Secretaries—Raymond Crawfurd, D'Arcy Power): at 5 P.M.
Lecture:
Professor Richard Caton: Health Temples in Ancient Greece and the Work carried on in Them. Illustrated by the epidiascope.
(All Members of the Medical Profession, including Students, whether Fellows of the Society or not, are invited to attend this meeting.)

THURSDAY.
SECTION OF DERMATOLOGY (Hon. Secretaries—J. M. H. MacLeod, S. E. Dore): at 5 P.M.
Cases:
Dr. G. Pernet: Two Cases of Dermatitis Artefacta.
Dr. J. M. H. MacLeod: Lichen Spinulosus with Lichen Planus.
Dr. Knowsley Sibley: (1) Lupus Erythematosus; (2) Stomatitis Neurotica Chronica.
Dr. S. E. Dore: (1) Congenital Hyperkeratosis of the Palms and Soles; (2) Congenital Alopecia; (3) Bromide Eruption.
And other Cases.

FRIDAY.
SECTION OF ELECTRO-THERAPEUTICS (Hon. Secretaries—Cecil R. C. Lyster, S. Gilbert Scott): at 8.30 P.M.
Paper:
Dr. Max Heiner (of St. Joachimsthal Sanatorium): Modern Radium-Therapy in all its Branches.

SECTION OF BALNEOLOGY AND CLIMATOLOGY:
Members of this Section are specially invited to attend the Meeting of the Section of Electro Therapeutics.

LONDON DERMATOLOGICAL SOCIETY, St. John's Hospital, 49, Leicester-square, W.C.
TUESDAY.—4.30 P.M. Demonstration of Pathological Specimens and Clinical Cases. 5.15 P.M., Discussion on the Dosage of X Rays (opened by Dr. W. Hampson).

CHELSEA CLINICAL SOCIETY, Club Rooms of the Medical School, St. George's Hospital, S.W.
TUESDAY.—8.30 P.M., Clinical Evening. Patients will attend at 8 P.M. Cases and Specimens will be shown by Mr H. G. Anderson, Mr. A. G. Buchanan, Dr. J. F. H. Daily, Dr. K. Eckenstein, Mr. C. Frankau, Dr. E. Hudson, and Dr. C. McClure.

BRITISH OTO-LARYNGOLOGICAL SOCIETY, 11, Chandos-street, Cavendish-square, W.
WEDNESDAY.—4.30 P.M., Meeting.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover-square, W.
WEDNESDAY.—8 P.M., Paper:—Mr. C. Beck: The Binocular Microscope of the Past and a New Form of the Instrument.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE, 11, Chandos-street, Cavendish-square, W.
FRIDAY.—8.30 P.M., Paper:—Dr. C. M. Wenyon: Kala-Azar in Malta, with some Remarks on the Various Leishmaniases. Demonstration:—Dr. H. B. Fantham and Dr. J. G. Thomson: Cultures of Piroplasma Canis. Malarial Culture Specimens:—Dr. D. Tomson. Paper:—Dr. J. O. Shircore and Mr. P. H. Ross: Epidemic Cerebro-spinal Meningitis in Nairobi.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

POST-GRADUATE COLLEGE, West London Hospital, Hammersmith-road, W.
MONDAY.—10 A.M., Dr. Simson: Diseases of Women. 10.30 A.M., Medical Registrar: Demonstration of Cases in Wards. 12 noon, Dr. Bernstein: Pathological Demonstration. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Armour: Operations. Dr. Pritchard: Bacterial Therapy Department. 2.30 P.M., Mr. Dunn: Diseases of the Eye. 5 P.M., Lecture:—Dr. Beddard: Constipation, its Causes and Treatment.
TUESDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. 10.30 A.M., Surgical Registrar: Demonstration of Cases in Wards. 12 noon, Mr. T. Gray: Demonstration of Fractures, &c. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin. 5 P.M., Lecture:—Dr. Beddard: Constipation, its Causes and Treatment.
WEDNESDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. 11 A.M., Mr. Souttar: Demonstration of Minor Operations. 12 noon, Lecture:—Mr. Souttar: Abdominal Diagnosis. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations. Mr. B. Harman: Diseases of the Eye. Dr. Simson: Diseases of Women. 5 P.M., Lecture:—Dr. Beddard: Constipation, its Causes and Treatment.
THURSDAY.—9 A.M., Dr Bernstein: Bacterial Therapy Department. 10.30 A.M., Dr. Simson: Gynæcological Demonstration. 12.15 P.M., Lecture:—Dr. G. Stewart: Neurological Cases. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Armour: Operations. 2.30 P.M., Mr. Dunn: Diseases of the Eye. 5 P.M., Lecture:—Dr. Beddard: Constipation, its Causes and Treatment.
FRIDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. 10.30 A.M., Lecture:—Dr. Owen: Practical Medicine. 12.15 P.M., Lecture:—Dr. Bernstein: Clinical Pathology. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin. 5 P.M., Lecture:—Dr. Beddard: Constipation, its Causes and Treatment
SATURDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. Mr. B. Harman: Diseases of the Eye. 12 noon, Lecture:—Mr. Souttar: Surgical Anatomy of the Abdomen. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations.

LONDON SCHOOL OF CLINICAL MEDICINE, Dreadnought Hospital, Greenwich.
MONDAY.—Out-patient Demonstrations:—10 A.M. Dr. Singer: Medical. Mr. H. Curtis: Surgical. 12 noon, Mr. G. N. Biggs: Throat, Nose, and Ear.—2.15 P.M., Mr. W. Turner: Surgery. 3 P.M., Mr. W. Turner: Operations. 3.15 P.M., Sir Dyce Duckworth: Medicine. 4.15 P.M., Mr. R. Lake: Ear and Throat. 3.15 P.M., Special Lecture:—Sir Dyce Duckworth: Clinical Indications of Senility.
TUESDAY.—Out-patient Demonstrations:—10 A.M., Dr. G. Holmes: Medical. Mr. Cole: Surgical. 12 noon, Dr. H. MacCormac: Skin.—2 P.M., Mr. L. McGavin: Operations. 2.15 P.M., Mr. R. Carling: Surgery. 3.15 P.M., Dr. G. Rankin: Medicine.
WEDNESDAY.—Out-patient Demonstrations: 10 A.M., Dr. F. Langmead: Medical. Mr. Cecil Rowntree: Surgical. 11 A.M., Mr. R. R. Bickerton: Eye.—2 P.M., Mr. L. V. Cargill or Mr. Choyce: Operations. 2.15 P.M., Dr. F. Taylor: Medicine. 3.15 P.M., Mr. Cargill: Eye Clinique. 4.30 P.M., Mr. C. C. Choyce: Surgery. 4.30 P.M., Special Lecture:—Mr. J. Cantlie: Means of Diagnosing Hepatic Disease.
THURSDAY.—Out-patient Demonstrations:—10 A.M., Dr. Singer: Medical. Mr. H. Curtis: Surgical. 12 noon, Mr. G. N. Biggs: Throat, Nose, and Ear.—2 P.M., Mr. R. Carling or Mr. W. Turner: Operations. Dr. A. Davies: Pathological Demonstration. 3.15 P.M., Dr. R. Wells: Medicine. 4.30 P.M., Special Lecture:—Mr. W. Turner: Some Acute Conditions of the Abdomen.
FRIDAY.—Out-patient Demonstrations:—10 A.M., Dr. G. Holmes: Medical. Mr. Cole: Surgical. 12 noon, Dr. H. MacCormac: Skin.—2 P.M., Mr. L. McGavin: Operations. 2.15 P.M., Sir John Rose Bradford; Medicine 3.15 P.M., Mr. L. McGavin: Surgery.
SATURDAY.—Out-patient Demonstrations: 10 A.M., Dr. F. Langmead: Medical. Mr. Cecil Rowntree: Surgical. 11 A.M., Mr. R. R. Bickerton: Eye.—10 A.M., Col. Barry: Radiography.

NORTH-EAST LONDON POST-GRADUATE COLLEGE, Prince of Wales's General Hospital, Tottenham, N.
MONDAY.—Clinics:—10.30 A.M., Surgical Out-patient (Mr. E. Gillespie). 2.30 P.M., Medical Out-patient (Dr. T. R. Whipham); Nose, Throat, and Ear (Mr. H. D. Gillies). 3 P.M., Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan).
TUESDAY.—2 P.M., The Parasitic Skin Affections (Dr. Meachen). 2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Surgical (Mr. Howell Evans); Gynæcological (Dr. A. E. Giles). 3 P.M., Selected Cases illustrating Hernia (Mr. Gillespie). 4 P.M., Examination of the Bladder by Modern Methods (Mr. Howell Evans).
WEDNESDAY.—Clinics:—2 P.M., Throat Operations (Mr. Gillies). 2.30 P.M., Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 P.M., X Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 P.M., Eye Operations (Mr. Brooks).
THURSDAY.—2.30 P.M., Gynæcological Operations (Dr. A. E. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 P.M., Medical In-patient (Dr. G. P. Chappel).
FRIDAY.—2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Surgical (Mr. E. Gillespie); Eye (Mr. R. P. Brooks). 3 P.M., Medical In-patient (Dr. R. M. Leslie); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan).

LONDON HOSPITAL MEDICAL COLLEGE (UNIVERSITY OF LONDON), Clinical Theatre, London Hospital, Mile End-road, E.
Course of Lectures on the Neuroses and Psychoses of Children:—
TUESDAY.—2 P.M., Dr. F. Warner: Mental Aptitudes and Abilities.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.
WEDNESDAY.—4.30 P.M., Lecture:—Dr. R. Shaw: The Importance for Prognosis of the Study of the Types of Pulmonary Tuberculosis.

THE THROAT HOSPITAL, Golden-square, W.

MONDAY.—5.15 P.M., Special Demonstration of Selected Cases.
THURSDAY.—5.15 P.M., Clinical Lecture.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, 49, Leicester-square, W.C.

TUESDAY.—6 P.M., Dr. K. Sibley: Lupus Vulgaris and Erythematosus.
THURSDAY.—5 P.M., Dr. M. Dockrell: Bullous and Vesicular Eruptions (continued)—V., Herpes; VI., Zoster; VII., Dermatitis Herpetiformis.

MANCHESTER HOSPITALS POST-GRADUATE CLINIC.

TUESDAY.—SALFORD ROYAL HOSPITAL—4.30 P.M., Mr. G. Wright: Treatment of Simple Fractures.
WEDNESDAY.—ROYAL INFIRMARY—4.30 P.M., Exhibition of Medical and Surgical Cases.
THURSDAY.—ANCOATS HOSPITAL—4.30 P.M., Dr. B. B. Leech: Colitis and Ulceration of Large Intestine.
FRIDAY.—ROYAL EYE HOSPITAL—4.30 P.M., Dr. T. M. Bride: Cases for Diagnosis.

UNIVERSITY OF SHEFFIELD POST-GRADUATE CLINICAL DEMONSTRATIONS.

TUESDAY.—SHEFFIELD ROYAL INFIRMARY.—3 P.M., Mr. Pooley: Diseases and Injuries of the Cornea.
FRIDAY.—SHEFFIELD ROYAL INFIRMARY.—3 P.M., Dr. Yates: Pathology and Treatment of Rheumatic Affections.

ROTUNDA HOSPITAL POST-GRADUATE COURSES, Dublin.

MONDAY.—10 A.M., Obstetrical Lecture: Abortion. (continued). 11 A.M. Examination of Patients and Minor Operations.
TUESDAY.—10 A.M., Major Operations.
WEDNESDAY.—10 A.M., Obstetrical Lecture: Ante-partum Hæmorrhage. 11 A.M., Examination of Patients and Minor Operations.
THURSDAY.—10 A.M., Major Operations.
FRIDAY.—10 A.M., Gynæcological Lecture: Displacements of the Uterus (continued). 11 A.M., Examination of Patients and Minor Operations.

For further particulars of the above Lectures, &c., see Advertisement Pages.

A DIARY OF CONGRESSES.

THE following Congresses, Conferences, and Exhibitions are announced.

In 1913:—

Dec. 16th-20th (Aberdeen).—Red Cross and National Health Service Exhibition.

In 1914:—

April 14th-18th (New York).—Fourth Congress of the International Surgical Society.
,, 20th-23rd (Wiesbaden).—Thirty-first German Congress for Internal Medicine.
May 1st-Nov. 1st (Lyons).—International Town Life Exhibition.
July 6th-11th (Blackpool).—Twenty-ninth Congress of the Royal Sanitary Institute.
,, 8th-13th (Edinburgh).—Congress of the Royal Institute of Public Health.
Aug. 3rd-8th (London).—Sixth International Dental Congress.
,, 10th-15th (St. Petersburg).—Twelfth International Congress of Ophthalmology.
Sept. 7th-12th (Berne).—International Congress for Neurology, Psychiatry, and Psychology.
September (Vienna).—Third International Congress for Diseases of Occupation.
(London).—Anglo-American Exhibition.
(Aberdeen).—Eighty-second Annual Meeting of the British Medical Association.
(Auckland, N.Z.).—Australasian Medical Congress.
(St. Petersburg).—Third Mendeléeff Congress of Pure and Applied Chemistry and Physics.

EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITOR," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention should be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers—not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, London, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect.

THE COLONIAL AND FOREIGN EDITION (printed on thin paper) is published in time to catch the weekly Friday mails to all parts of the world.

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Subscriptions (which may commence at any time) are payable in advance. Cheques and Post Office Orders (crossed "London County and Westminster Bank, Covent Garden Branch") should be made payable to the Manager, Mr. CHARLES GOOD, THE LANCET Offices, 423, Strand, London, W.C.

TO COLONIAL AND FOREIGN SUBSCRIBERS.

SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE.

The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Dec. 10th, 1913.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks.
Dec. 4	29·44	W.	0·01	65	46	42	40	42	Fine
,, 5	29·68	W.	0·04	67	49	38	42	44	Overcast
,, 6	29·66	E.	0·06	47	46	42	41	43	Overcast
,, 7	30·04	S.E.	0·07	49	47	41	43	45	Overcast
,, 8	30·23	S.W.	...	64	54	41	46	47	Overcast
,, 9	30·09	S.W.	...	62	56	47	52	53	Overcast
,, 10	30·23	W.	0·03	53	50	45	44	46	Overcast

The following journals, magazines, &c., have been received:—American Journal of Tropical Diseases, Maryland Medical Journal, Annales de l'Institut Pasteur, Concrete and Constructional Engineering, Indian Medical Record, American Journal of Medical Sciences, British Journal of Children's Diseases, Medical Review, Public Health, Archives Generales de Médicine, Annales de Gynécologie et d'Obstétrique, Journal of State Medicine, Medical Chronicle, Bulletins et Mémoires de la Société de Radiologie Méticale de Paris, Die Therapie der Gegenwart, Calcutta Medical Journal, British Journal of Dental Science, Archiv für Experimentelle Pathologie und Pharmakologie, Jahrbuch für Kinderheilkunde, Archives de Médecine et Pharmacie Navales, Journal of Tropical Medicine and Hygiene Cornell University Medical Bulletin, Middlesex Hospital Journal, &c.

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I.—Messrs. Ingram and Royle, Lond.; *Interstate Medical Journal*, St. Louis, U.S.A.

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